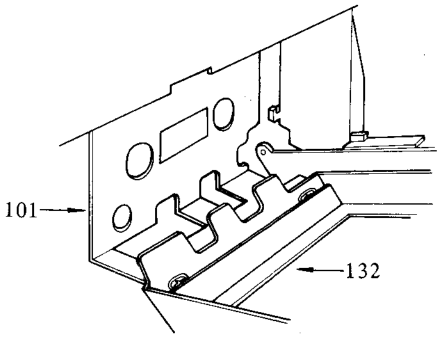
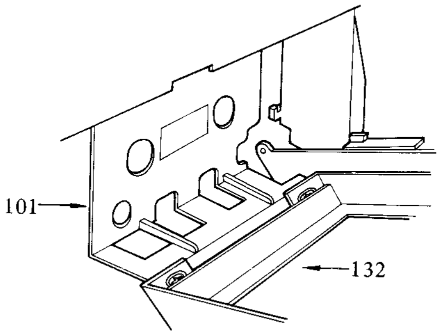
SHARP Technical Information

MODEL GF-4000H/GF-4010X

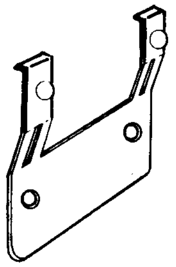
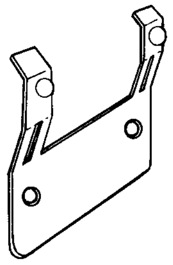
To improve the performance of MODEL GF-4000H/GF-4010X. The following parts will be changed.

MISCELLANEOUS

REF NO.	OLD	NEW
101		
	GCABA0404AFSA (GF-4000H)	GCABA0419AFSA (GF-4000H)
	GCABA0409AFSA (GF-4010X)	GCABA0420AFSA (GF-4010X)
132	GFTAC1051AFSA	GFTAC1057AFSA

As seen from the above figure, cassette Lid and cabinet, there is not such an exchangeability.

MECHANICAL PARTS

REF NO.	OLD	NEW
033		
	MSPRT0076AFFW	MSPRT0111AFFW

As for the cassette retaining spring, old and new ones are exchangeable to each other.

A2503-4.2MNK
Printed in Japan

SHARP CORPORATION OSAKA, JAPAN

SHARP CORPORATION
OSAKA, JAPAN

Correction Sheet

No. 011

MODEL NO.	PAGE	ITEM	REF. NO.	PART NO.		DESCRIPTION	CODE	
				ERROR	CORRECT		ERROR	CORRECT
GF-4000H GF-4010X	21/22	SCHEMATIC-DIAGRAM	IC101	RH-IX0928AFZZ	RH-IX0933AFZZ			
	25/26		IC201	RH-IX0933AFZZ	RH-IX0928AFZZ			
	27	PARTS LIST	IC101	RH-IX0928AFZZ	RH-IX0933AFZZ	Pre Amp.	AH	AK
			IC201	RH-IX0933AFZZ	RH-IX0928AFZZ	AF Amp.	AK	AH
			T6	RCILA0006AFZZ	RFILA0006AFZZ	AM MIX		
	28	PARTS LIST	D5	VHD1N60////-2	VHD1N60////-3	FM Detector (Matched Pair)		
			D8	VHD1S2976//-1	VHD1S2076//-1	Static Protector		
			SCR301	VHSSCR1////IS	VHSSCR1////IG	Thyristor		
	21/22 25/26	SCHEMATIC-DIAGRAM	C102	6.3/47	16/10			
			C105	16/10	6.3/47			
GF-4000H	27	PARTS LIST	L11	RCILA0353AFZZ	RCILA0353AFLB	LW, MW Antenna		
	32	PARTS LIST	132	CFTAC1051AFSA	GFTAC1057AFSA	Lid, Cassette Compartment		
RD-468HN	17	PARTS LIST	001	MSPRC0041GMN	MSPRC0041AGMN	Spring, Bracket Lever		
SA-607H	35	PARTS LIST	VR102	RVR-B0057AGZZ	RVR-B0052AGZZ	Volume		
SG-155H	16	PARTS LIST	020	701354	701356	Turntable Ass'y		
RP-203H	5	PARTS LIST	017-8	891485	891485	Spring, Switch Lever	FOB YEN 165	FOB YEN 13
RP-203H	5	PARTS LIST	064	630582	630582	Motor Assembly	FOB YEN 215	FOB YEN 2,970
GF-3000H	28	PARTS LIST	194	RMICC0001AFZZ	RMICC0050AFZZ	Built in Microphone	AP	AL
RG-2000 RG-2500	27	PARTS LIST	88	000094350	000094320	4-prong connection with Lead Wire	AU	AT
RG-2010	17	PARTS LIST	88	000091320	000094320	4-Prong connection with Lead Wire	AU	AT
RG-2000 RG-2500	28	PARTS LIST	135	000094350	000094330	Power cord with Fuse		
RG-2000 RG-2500	28	PARTS LIST	–	000094250	000094350	4-Prong wiring Harness (speaker cord)		

MODEL NO.	PAGE	ITEM	REF. NO.		PART NO.	DESCRIPTION	CODE
			ERROR	CORRECT			
GF-4000H	21/22	SCHEMATIC-DIAGRAM	C82	C85	.0022		

SHARP

A2502-4.2MYM
Printed in Japan

CABINET DISASSEMBLY

HOW TO REMOVE CABINET

1. Pull out the knobs of VOLUME, TREBLE, BASS, REC-LEVEL and FADER CONTROL respectively located on the upper surface.
2. Pull out the tuning knob at the side surface.
3. Take out the cassette tape and battery, if set in.
4. Unscrew six screws fixing the rear lid, then open the lid.

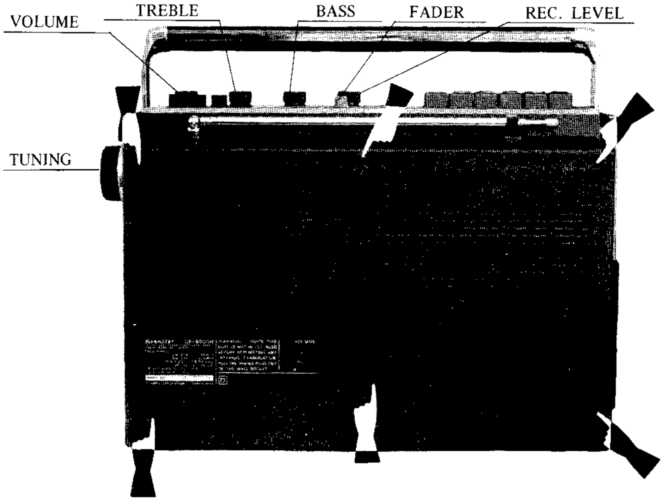


Figure 1 CABINET BOTTOM REMOVAL

5. Remove the antenna lead by pulling it.
6. Draw out the 9-pin plug at the center of chassis.
7. Unscrew six screws fixing the chassis to the cabinet as per the figure.
8. Take out the chassis from the cabinet taking care of the leads therein.
9. The four lever switches at the front SECTION should be held up and the mode switch, set at "RADIO" position during the work of assembly or disassembly.

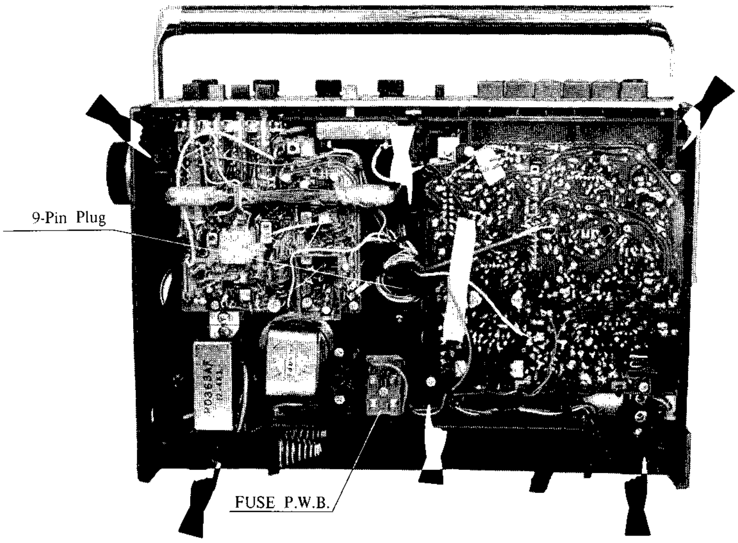


Figure 2 CABINET TOP REMOVAL

Note: These photos of Figure 1 and Figure 2 are GF-4000H. GF-4010X is not used a fuse P.W.B.

ELECTRICAL MEASUREMENT

This unit operates on DC 9V. Check that the power supply exactly 9V before measurement.

■ RECORD OSCILLATOR BIAS FREQUENCY AND BIAS CURRENT ADJUSTMENT (Refer to Figure 3)

1. Set the unit in Record mode.
2. Connect 100 ohm, 1/2W, 5% resistor between the ground tip and the lead of R/P head.
3. Connect 8 ohm, 5W, 5% resistor to the EXT. Speaker jack.
4. Set the Volume and Tone controls to their mechanical center position respectively.
5. Connect the VTVM across the 100 ohm resistor.
6. Rotate the variable resistor (R130) to its mechanical center position.
7. Set the RIF switch to "A" position and adjust the dust core of the oscillator coil (L102) so that the bias oscillator frequency is at 53.0kHz.
8. Adjust the bias current for 600μA by turning the variable resistor (R130).
9. Set the RIF switch to "B" position, then check that the variation of bias oscillator frequency is -5.5 ~ –6.5kHz.

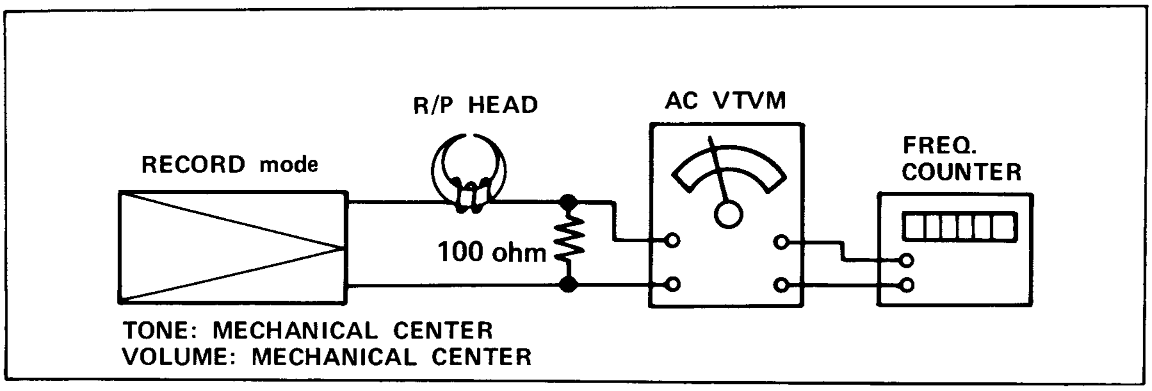

R/P HEAD
AC VTVM
RECORD mode
FREQ. COUNTER
100 ohm
TONE: MECHANICAL CENTER
VOLUME: MECHANICAL CENTER

Figure 3

■ ERASE VOLTAGE (Refer to Figure 4)

1. Set the unit in RECORD MODE.
2. Connect an 1 ohm, 1/2W, 5% resistor to the ground lead of the erase head.
3. Connect an AC VTVM across the 1 ohm resistor.
4. Erase voltage is more than 50mV when the RIF switch is in "A" or "B" position.

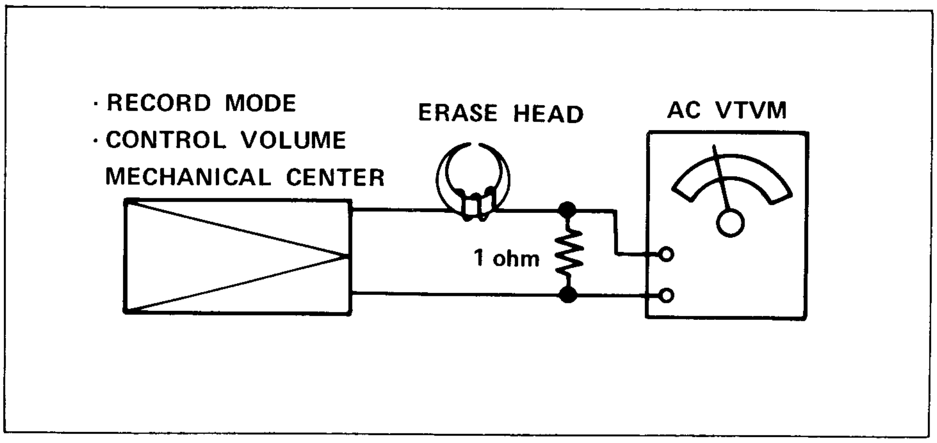

· RECORD MODE
· CONTROL VOLUME
MECHANICAL CENTER
ERASE HEAD
AC VTVM
1 ohm

Figure 4

■ RECORD AMPLIFIER SENSITIVITY (Refer to Figure 5)

1. Place the unit in Record mode.
2. Short circuit the secondary coil of the Bias Oscillator coil (L102) to stop bias oscillation.
3. Connect a 100 ohm, 1/2W, 5% resistor to the ground lead of the R/P Head.
4. Set the ALC/FADER Switch to FADER position.
5. Set the "FADER CONTROL" to EXT MIC position.
6. Connect the audio signal generator for 1000Hz −72dB (0dB = 1V) to the EXT. MIC. jack.
7. Connect an AC VTVM across the 100 ohm resistor.

If the record amplifier sensitivity is normal, the reading on AC VTVM should be approximately 4.0mV.

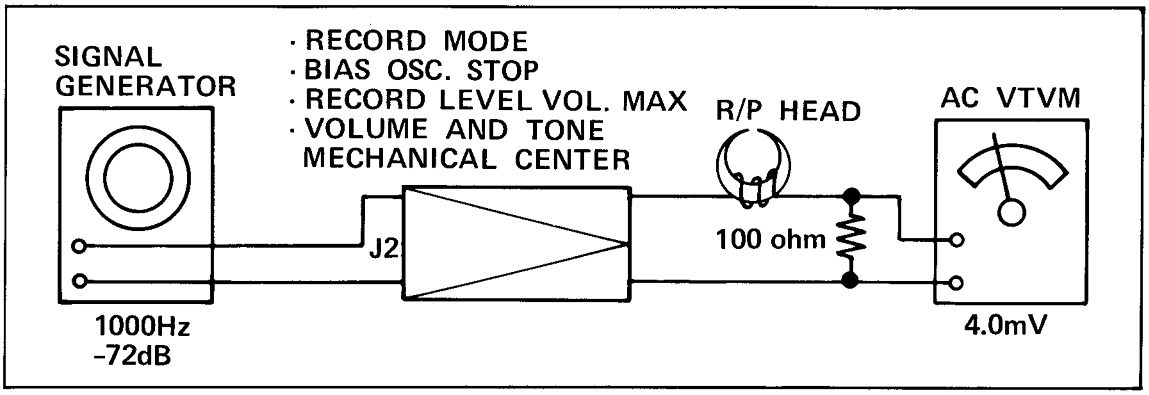

SIGNAL GENERATOR
· RECORD MODE
· BIAS OSC. STOP
· RECORD LEVEL VOL. MAX
· VOLUME AND TONE MECHANICAL CENTER
R/P HEAD
AC VTVM
J2
100 ohm
1000Hz
-72dB
4.0mV

Figure 5

■ PLAYBACK AMPLIFIER SENSITIVITY CHECK (Refer to Figure 6)

1. Place the unit in PLAYBACK mode with the Volume at maximum.
2. Rotate the Tone Controls (Bass and Treble) to their mechanical center position.
3. Connect an 8 ohm, 5W, 5%, resistor to the EXT. Speaker jack.
4. Connect the audio signal generator for -78dB (0dB = 1V) across the ground lead of the R/P Head.
5. Connect an AC VTVM across the 8 ohm resistor.

If the playback amplifier sensitivity is normal, the reading on the AC VTVM should be approximately 1.2V

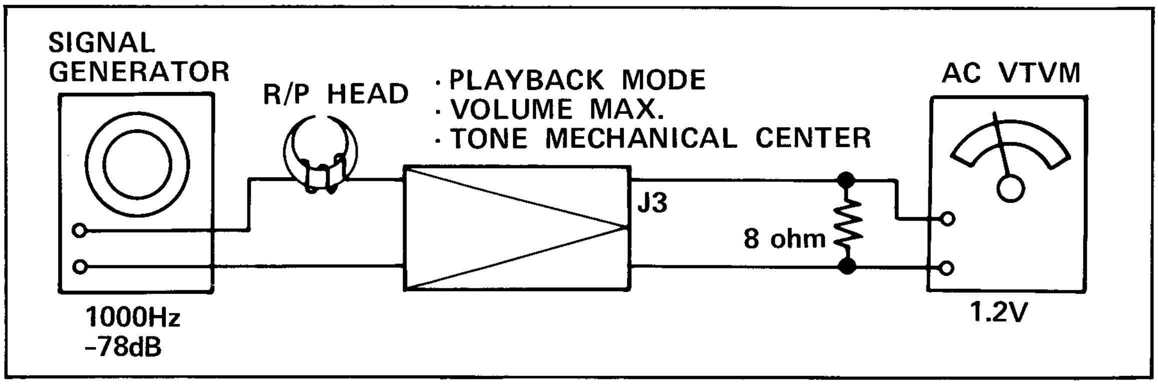

SIGNAL GENERATOR
R/P HEAD
· PLAYBACK MODE
· VOLUME MAX.
· TONE MECHANICAL CENTER
AC VTVM
J3
8 ohm
1000Hz
-78dB
1.2V

Figure 6

■ MECHANICAL FULL-AUTO STOP MECHANISM

Refer to Service Manual of Model GF-3010H/GF-3020X.

■ MECHANICAL ADJUSTMENT

Refer to Service Manual of Model GF-3010H/GF-3020X.

ALIGNMENT PROCEDURE (TUNER)

Should it become necessary at any time to check the alignment of this receiver, proceed as follows;

1) Connect an output meter across the speaker voice coil lugs.
2) Set the volume control to maximum.
3) Attenuate the signals from the generator enough to swing the most sensitive range of the output meter.
4) Use a non-metallic alignment tool.
5) Repeat adjustments to insure good results.
6) Set the MODE switch to "RADIO ON" position.

THE INSTRUCTION OF FREQUENCY ADJUSTMENT (GF-4000H)

In order to comply with FTZ rule: Nr. 358 S757, please fix the low end of dial frequency (87.5MHz) and the high end of dial frequency (107.9MHz) on FM band, by adjusting oscillation coil (L8, L9) and oscillation trimmer (C6), respectively, as illustrated in Figure 7.

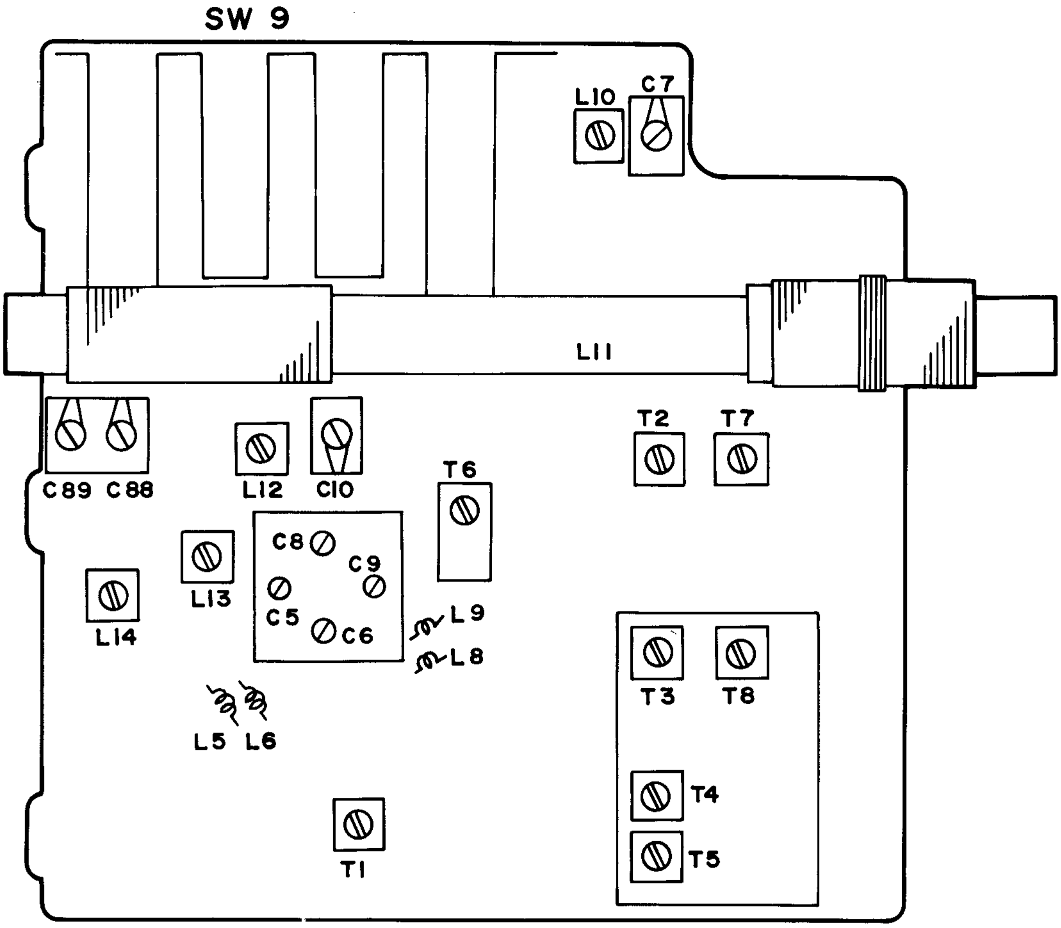


Figure 7 ALIGNMENT POINT

AM ALIGNMENT CHART

MW, LW, SW – GF-4000H
MW, SW1, SW2 – GF-4010X

STEP	BAND	TEST STAGE	SIGNAL GENERATOR		RECEIVER		ADJUSTMENT
			CONNECTION TO · RECEIVER	INPUT SIGNAL FREQUENCY	DIAL SETTING	REMARKS	
1	MW	IF	Connect signal generator through a 10K ohm resistor to the antenna tuning capacitor. Ground lead to the receiver chassis.	Exactly 455kHz, (400Hz, 30%, AM modulated)	Tuning gang fully open. (minimum capacity)	Adjust for maximum output on speaker voice coil lugs.	T6, T7, T8
2	MW	Band Coverage	Use radiating loop. Loop of several turns of wire, or place generator lead close to receiver for adequate signal pickup. Connect generator output to one end of this wire.	Exactly 510kHz, (400Hz, 30%, AM modulated)	Tuning gang fully closed. (maximum capacity)	Same as step 1.	Adjust the MW oscillator coil L13 (GF-4000H) L14 (GF-4010X)
3	MW	Band Coverage	Same as step 2.	Exactly 1650kHz, (400Hz, 30%, AM modulated)	Tuning gang fully open. (minimum capacity)	Same as step 1.	Adjust the MW oscillator trimmer C88 (GF-4000H) C89 (GF-4010X)
4	MW	Tracking	Same as step 2.	Exactly 600kHz, (400Hz, 30%, AM modulated)	600kHz.	Same as step 1.	Adjust the MW antenna coil L11 (See NOTE A)
5	MW	Tracking	Same as step 2.	Exactly 1400kHz, (400Hz, 30%, AM modulated)	1400kHz.	Same as step 1.	Adjust the MW antenna trimmer C8 (GF-4000H) C9 (GF-4010X) (See NOTE A)
6	MW		Repeat steps 2, 3, 4 and 5 until no further improvement can be made.				
7	LW SW1	Band Coverage	Same as step 2.	Exactly 145kHz (GF-4000H) Exactly 2.25MHz (GF-4010X) (400Hz, 30%, AM modulated)	Tuning gang fully closed. (maximum capacity)	Same as step 1.	Adjust the LW (GF-4000H) SW1 (GF-4010X) oscillator coil L14 (GF-4000H) L13 (GF-4010X)
8	LW SW1	Band Coverage	Same as step 2.	Exactly 295kHz (GF-4000H) Exactly 7.4MHz (GF-4010X) (400Hz, 30%, AM modulated)	Tuning gang fully open. (minimum capacity)	Same as step 1.	Adjust the LW (GF-4000H) SW1 (GF-4010X) oscillator trimmer C89 (GF-4000H) C88 (GF-4010X)
9	LW SW1	Tracking	Same as step 2.	Exactly 160kHz (GF-4000H) Exactly 2.6MHz (GF-4010X) (400Hz, 30%, AM modulated)	160kHz (GF-4000H) 2.6MHz (GF-4010X)	Same as step 1.	Adjust the LW (GF-4000H) SW1 (GF-4010X) antenna coil L11 (See NOTE A)
10	LW SW1	Tracking	Same as step 2.	Exactly 260kHz (GF-4000H) Exactly 6.0MHz (GF-4010X) (400Hz, 30%, AM modulated)	260kHz (GF-4000H) 6.0MHz (GF-4010X)	Same as step 1.	Adjust the LW (GF-4000H) SW1 (GF-4010X) antenna trimmer C9 (GF-4000H) C8 (GF-4010X) (See NOTE A)
11	LW SW1		Repeat steps 7, 8, 9 and 10 until no further improvement can be made.				

NOTE A: Check the alignment of the receiver antenna coil by bringing a piece of ferrite (such as a coil slug) near the antenna loop stick, then a piece of brass. If ferrite increases output, loop requires more inductance, change loop inductance by sliding the bobbin toward the center of ferrite core to increase, or away to decrease inductance.

STEP	BAND	TEST STAGE	SIGNAL GENERATOR		RECEIVER		ADJUSTMENT
			CONNECTION TO RECEIVER	INPUT SIGNAL FREQUENCY	DIAL SETTING	REMARKS	
12	SW SW2	Band Coverage	Connect the terminal of the generator to the rod antenna through the 80 ohm and the 10PF.	Exactly 5.85MHz (GF-4000H) Exactly 7.2MHz (GF-4010X) (400Hz, 30%, AM modulated)	Tuning gang fully closed. (maximum capacity)	Same as step 1.	Adjust the SW (GF-4000H) SW2 (GF-4010X) oscillator coil L12.
13	SW SW2	Band Coverage	Same as step 12.	Exactly 18.5MHz (GF-4000H) Exactly 22.5MHz (GF-4010X) (400Hz, 30%, AM modulated)	Tuning gang fully open. (minimum capacity)	Same as step 1.	Adjust the SW (GF-4000H) SW2 (GF-4010X) oscillator trimmer C10.
14	SW SW2	Tracking	Same as step 12.	Exactly 6.5MHz (GF-4000H) Exactly 8.5MHz (GF-4010X) (400Hz, 30%, AM modulated)	6.5MHz (GF-4000H) 8.5MHz (GF-4010X)	Same as step 1.	Adjust the SW (GF-4000H) SW2 (GF-4010X) antenna coil L10.
15	SW SW2	Tracking	Same as step 12.	Exactly 16MHz (GF-4000H) Exactly 19MHz (GF-4010X) (400Hz, 30%, AM modulated)	16MHz (GF-4000H) 19MHz (GF-4010X)	Same as step 1.	Adjust the SW (GF-4000H) SW2 (GF-4010X) antenna trimmer C7.
16	SW SW2		Repeat steps 12, 13, 14 and 15 until no further improvement can be made.				

FM ALIGNMENT PROCEDURES

* Set the Band Selector Switch at "FM" position.

STEP	TEST STAGE	SIGNAL GENERATOR		DIAL SETTING	INDICATOR	ADJUSTMENT	REMARKS
		CONNECTION	FREQUENCY				
1	IF	Through 5PF capacitor to TP3 and ground.	10.7MHz (400Hz, 30%, FM modulated)	Low end of dial (maximum capacity)	DC probe of VTVM to point TP5 and ground.	Detune T5 Tune T1, T2, T3	Adjust for maximum indication.
		Repeat until no further improvement can be made.					
2	Ratio Detector	Same as step 1.	10.7MHz (unmodulated)	Same as step 1.	DC probe of VTVM to point. TP7 and ground.	T4, T5	Adjust for zero reading. A positive or negative reading will be obtained on either side of the correct setting.
		Repeat until no further improvement can be made.					
3	Band Coverage	Through 75 ohm matching pad to FM antenna terminal.	87.1MHz 400Hz, 30%, (22.5kHz Dev.), FM modulated.	Low end of dial (maximum capacity)	Output meter (VTVM) across voice coil.	Oscillator coil L8, L9.	Adjust for maximum output.
		Same as above.	109MHz 400Hz, 30%, (22.5kHz Dev.), FM modulated.	High end of dial (minimum capacity)	Same as above.	Oscillator trimmer C6.	Same as above.
		Repeat until no further improvement can be made.					
4	Tracking	Same as step 1.	88MHz 400Hz, 30%, (22.5kHz Dev.), FM modulated.	Tune to signal.	Same as step 3.	RF coil L5, L6	Same as step 3.
		Same as above.	108MHz 400Hz, 30%, (22.5kHz Dev.), FM modulated.	Tune to signal.	Same as above.	RF trimmer C5.	Same as above.
		Repeat until no further improvement can be made.					

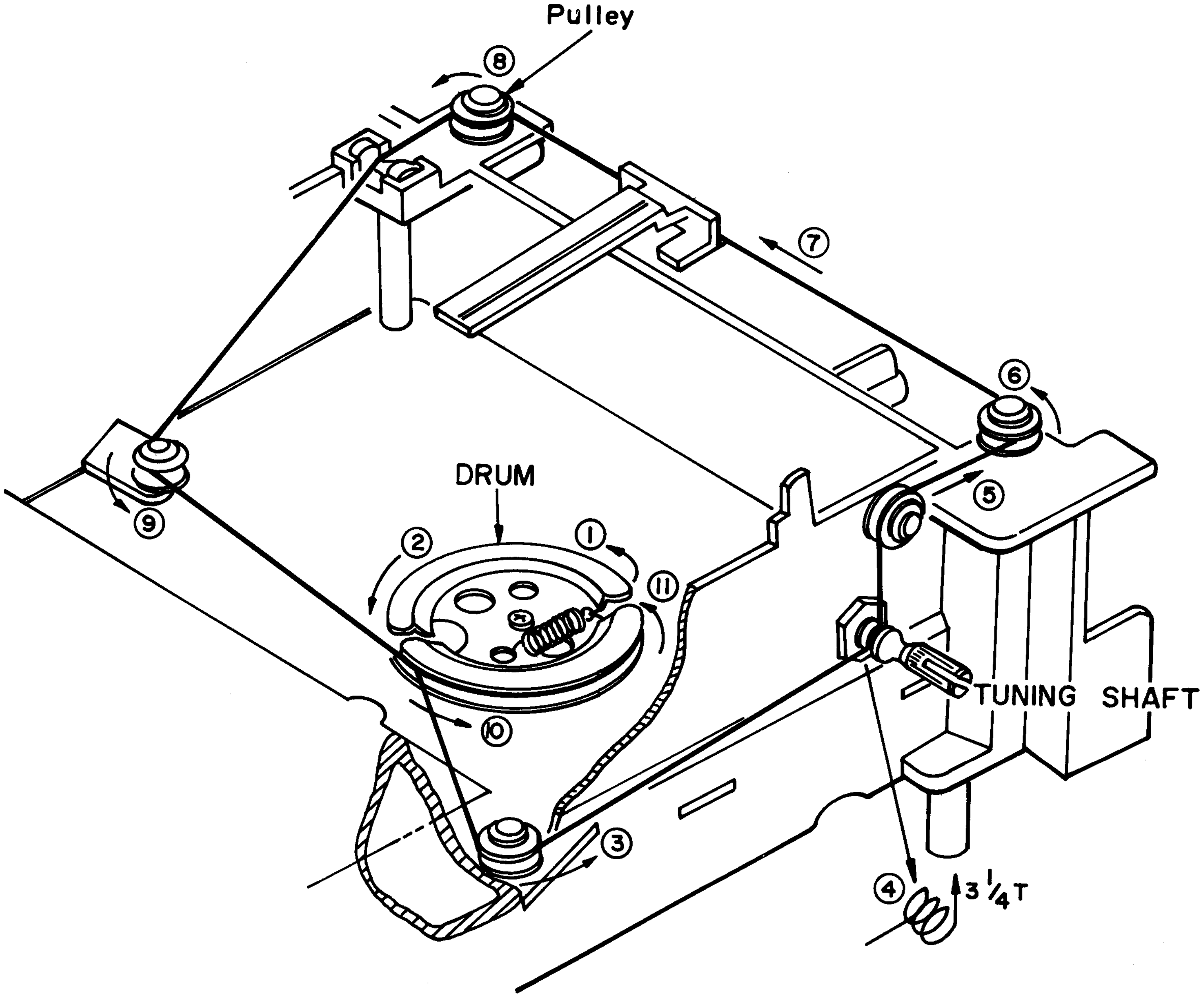

Pulley
⑧
⑦
⑥
⑨
DRUM
②
①
⑪
⑤
⑩
TUNING SHAFT
③
④
3 1/4 T

Figure 8 DIAL CORD STRINGING

A.P.S.S. CIRCUITS DESCRIPTION

CHARACTERISTICS

At playback mode, if the APSS switch is pressed, the tape travels by three times as high as the normal speed until the next program and then the tape speed is slowed down to the normal speed, restarting the tape playing. The APSS is very convenient for program selection.

PRINCIPLE OF APSS

When the APSS is turned on during playback mode, the signal-contained part and non signal-contained part are automatically detected by the playback head. On the course of the signal-contained part, the tape speed becomes three time as high as the ordinary speed and it resumes the original speed on the course of the non signal-contained part. Below is shown the change of tape speed.

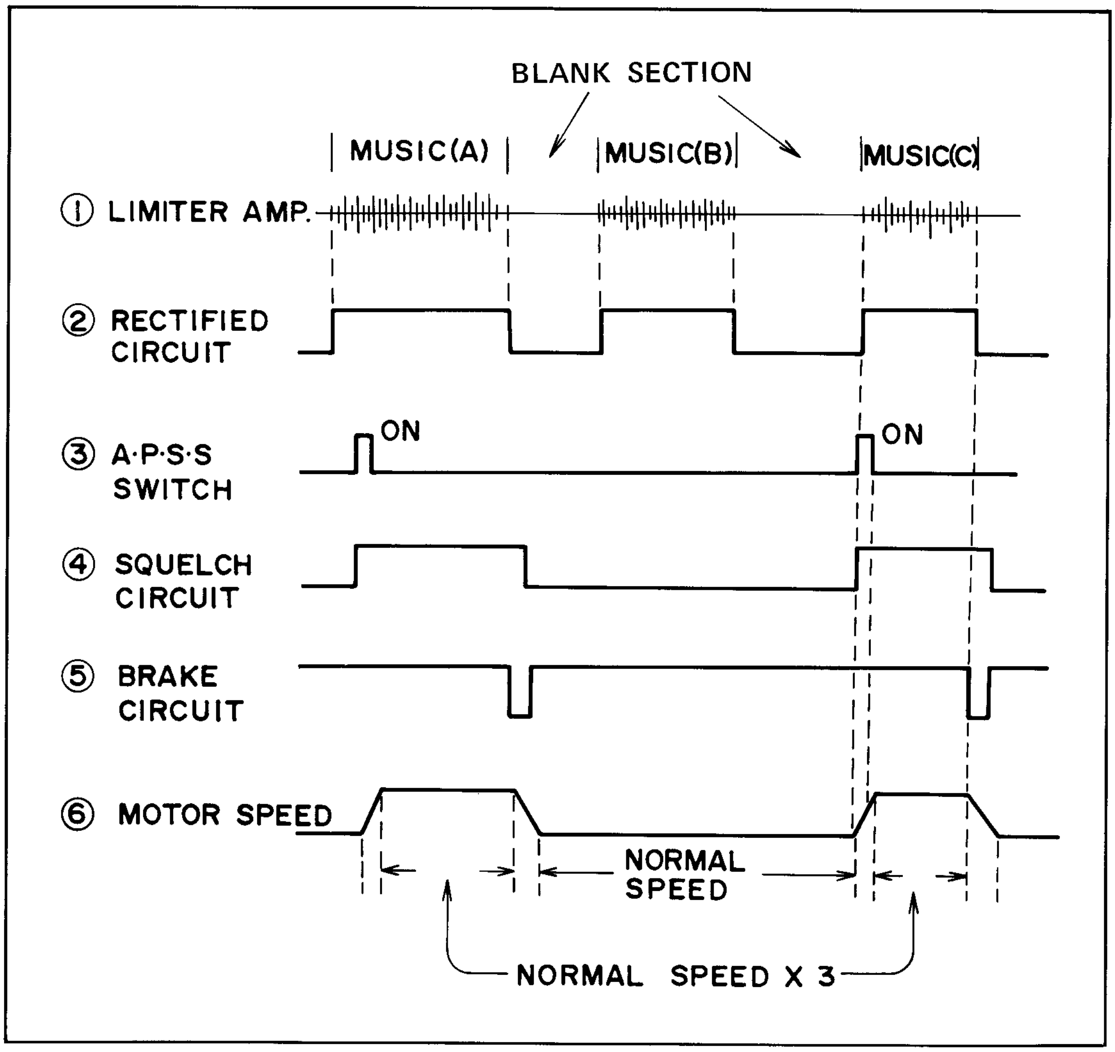

BLANK SECTION
MUSIC(A)
MUSIC(B)
MUSIC(C)
① LIMITER AMP.
② RECTIFIED CIRCUIT
③ A·P·S·S SWITCH
ON
ON
④ SQUELCH CIRCUIT
⑤ BRAKE CIRCUIT
⑥ MOTOR SPEED
NORMAL SPEED
NORMAL SPEED X 3

Figure 9 A.P.S.S. MOVEMENT PRINCIPLE

LIMITER AMP (Refer to Figure 9)

This amplifier is composed of Q301 and Q302 and serves to amplify the output of equalizer amplifier of the tape recorder to the level where the APSS starts to move.

RECTIFIER CIRCUIT (Refer to Figure 9)

This rectifier circuit is composed of D302, D303 and C305 to convert low-frequency signals which have been amplified by Q301 and Q302, into control signals.

APSS SWITCH, APSS OUTPUT AND MOTOR SPEED (Refer to Figure 9)

When SW3 is turned on with the abovementioned control signals being given, Q304 is turned on and this "ON" condition is maintained by SCR301. Then, Q306 is turned on thanks to the voltage at the sides of R312 to cut off the motor speed control circuit raising the motor speed. (Three-fold speed adjustment is made by R322.)

SQUELCH CIRCUIT (Refer to Figure 9)

With this squelch circuit, rectification is performed thanks to the voltage at the sides of R312 to shut off IC-201, thus making mute unpleasant noises possibly caused when the APSS is turned on.

BRAKE CIRCUIT

Q304 is turned off when the program playback ends and control signals come off, then Q306 is also turned off. Therefore, the motor is subjected to speed control and it is speeded down to the original speed. To make this speed changeover quickly, the motor is braked by the use of charge current of C307. Simultaneously the squelch circuit is cut off. Under the above processes, automatic detection of the program head is performed. The APSS functions erroneously in the following instances. However, this does not mean the mechanical trouble.

a. When a tape containing intermittent sounds like conversations is used, the motor speed does not rise up (to three-fold speed).
b. When a tape containing pianissimo-tune sounds or long dumb notes is used, the motor speed does not rise up (to three-fold speed).
c. When a tape containing low-record-level notes (less than -20dB) is used, the motor speed does not rise up.
d. When a tape whose program-to-program interval is too short (less than about 2 seconds) is used, the motor speed is not slowed down to the rating speed.
e. When a tape containing too significant noises and hums is used, the motor speed is not slowed down to the rating speed.

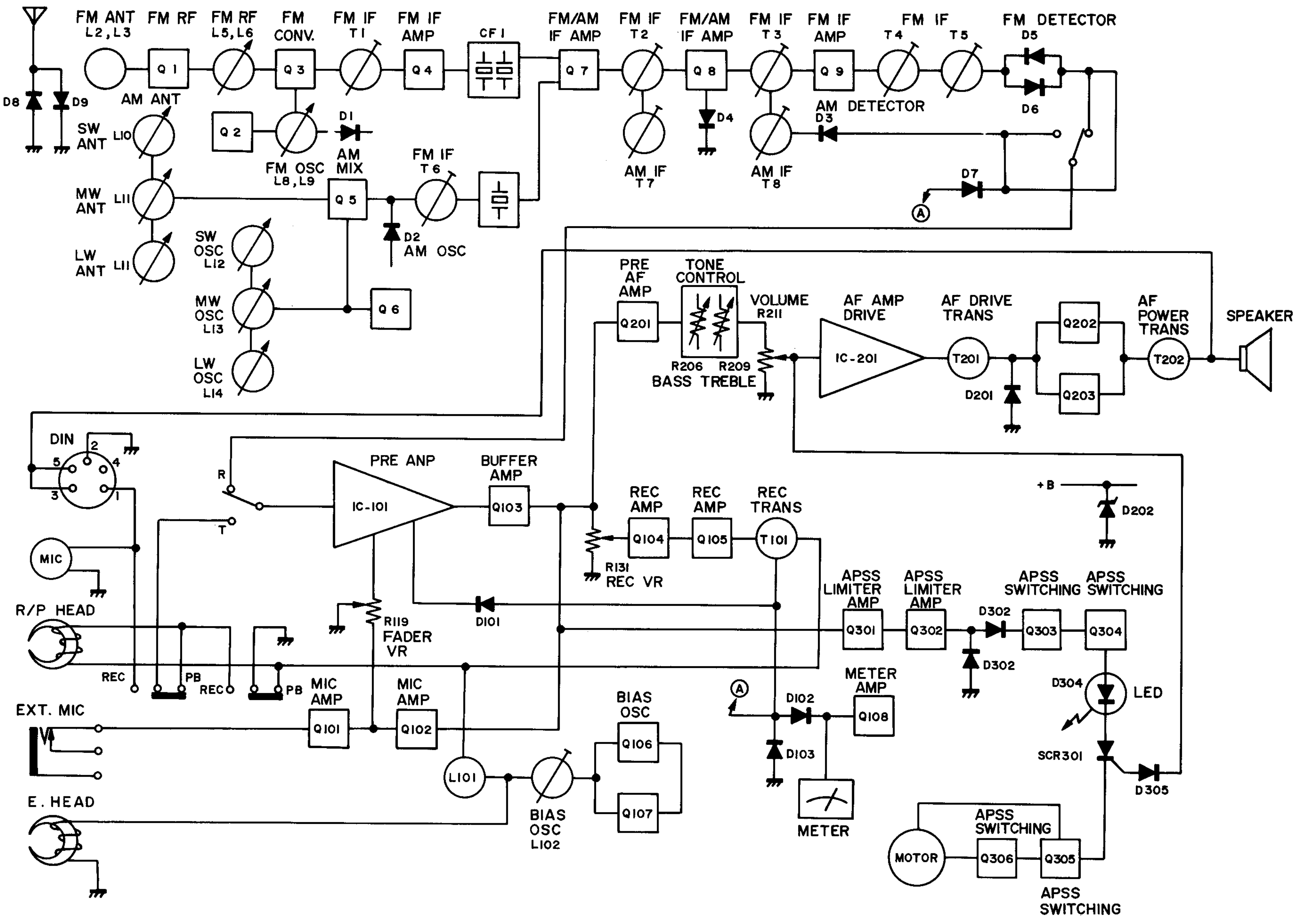

FM ANT
L2, L3
FM RF
FM RF
L5, L6
FM
CONV.
FM IF
T1
FM IF
AMP
CF1
FM/AM
IF AMP
FM IF
T2
FM/AM
IF AMP
FM IF
T3
FM IF
AMP
FM IF
T4
T5
FM DETECTOR
D5
D6
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
Q9
D8
D9
AM ANT
SW
ANT
L10
MW
ANT
L11
LW
ANT
L11
D1
FM OSC
L8, L9
AM
MIX
FM IF
T6
D2
AM OSC
SW
OSC
L12
MW
OSC
L13
LW
OSC
L14
AM IF
T7
D4
AM IF
T8
AM DETECTOR
D3
D7
Ⓐ
PRE
AF
AMP
Q201
TONE
CONTROL
R206
R209
BASS TREBLE
VOLUME
R211
AF AMP
DRIVE
IC-201
AF DRIVE
TRANS
T201
D201
Q202
Q203
AF
POWER
TRANS
T202
SPEAKER
DIN
1
2
3
4
5
R
T
PRE ANP
IC-101
BUFFER
AMP
Q103
REC
AMP
Q104
REC
AMP
Q105
REC
TRANS
T101
R131
REC VR
+B
D202
MIC
R/P HEAD
REC
PB
REC
PB
R119
FADER
VR
D101
APSS
LIMITER
AMP
Q301
APSS
LIMITER
AMP
Q302
D302
D302
APSS
SWITCHING
Q303
APSS
SWITCHING
Q304
D304
LED
SCR301
D305
EXT. MIC
MIC
AMP
Q101
MIC
AMP
Q102
L101
E. HEAD
BIAS
OSC
L102
BIAS
OSC
Q106
Q107
Ⓐ
D102
D103
METER
AMP
Q108
METER
MOTOR
APSS
SWITCHING
Q306
Q305
APSS
SWITCHING

Figure 10 BLOCK DIAGRAM

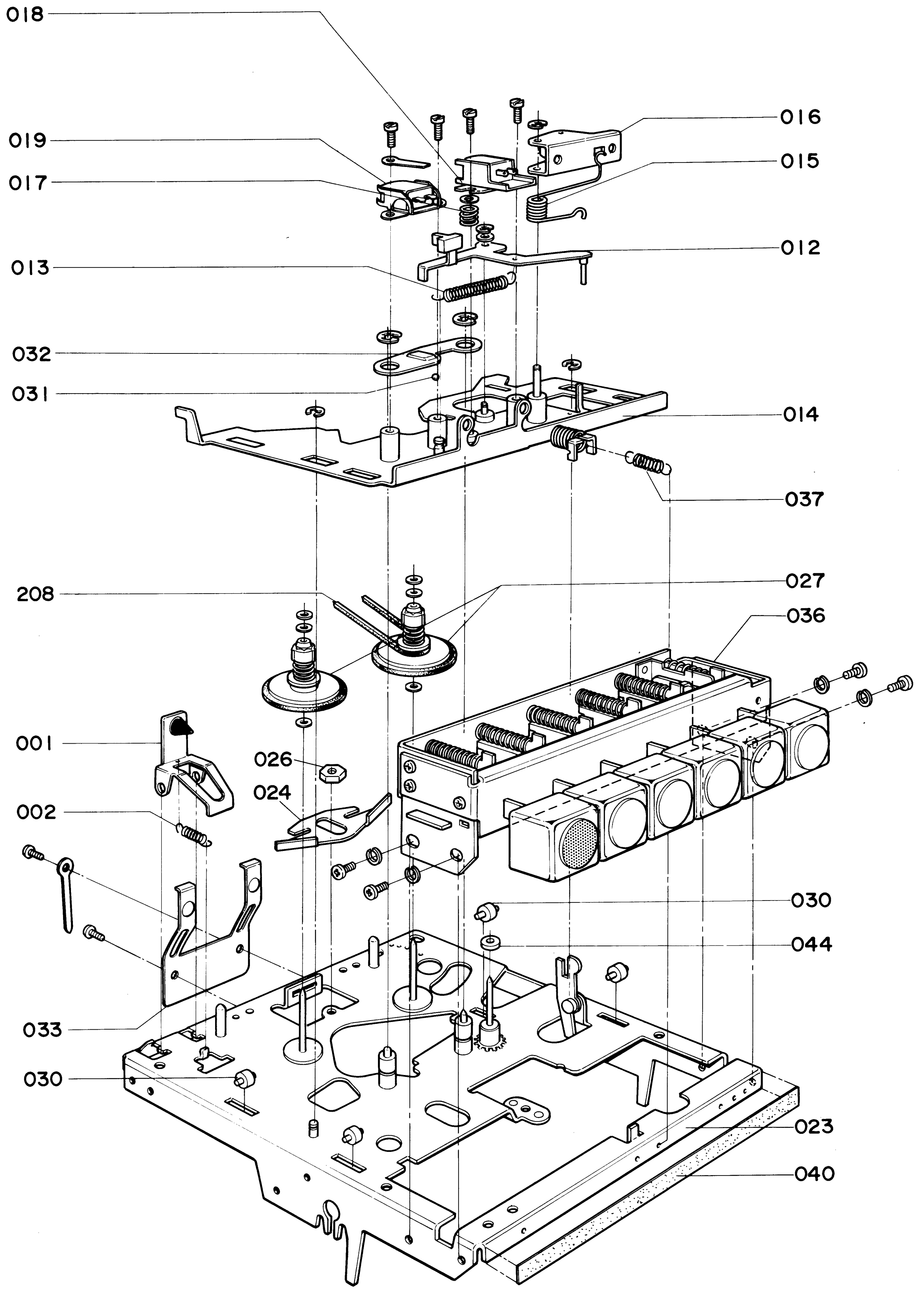

018
016
019
015
017
012
013
032
031
014
037
208
027
036
001
026
024
002
030
044
033
030
023
040

Figure 11 MECHANISM EXPLODED TOP VIEW

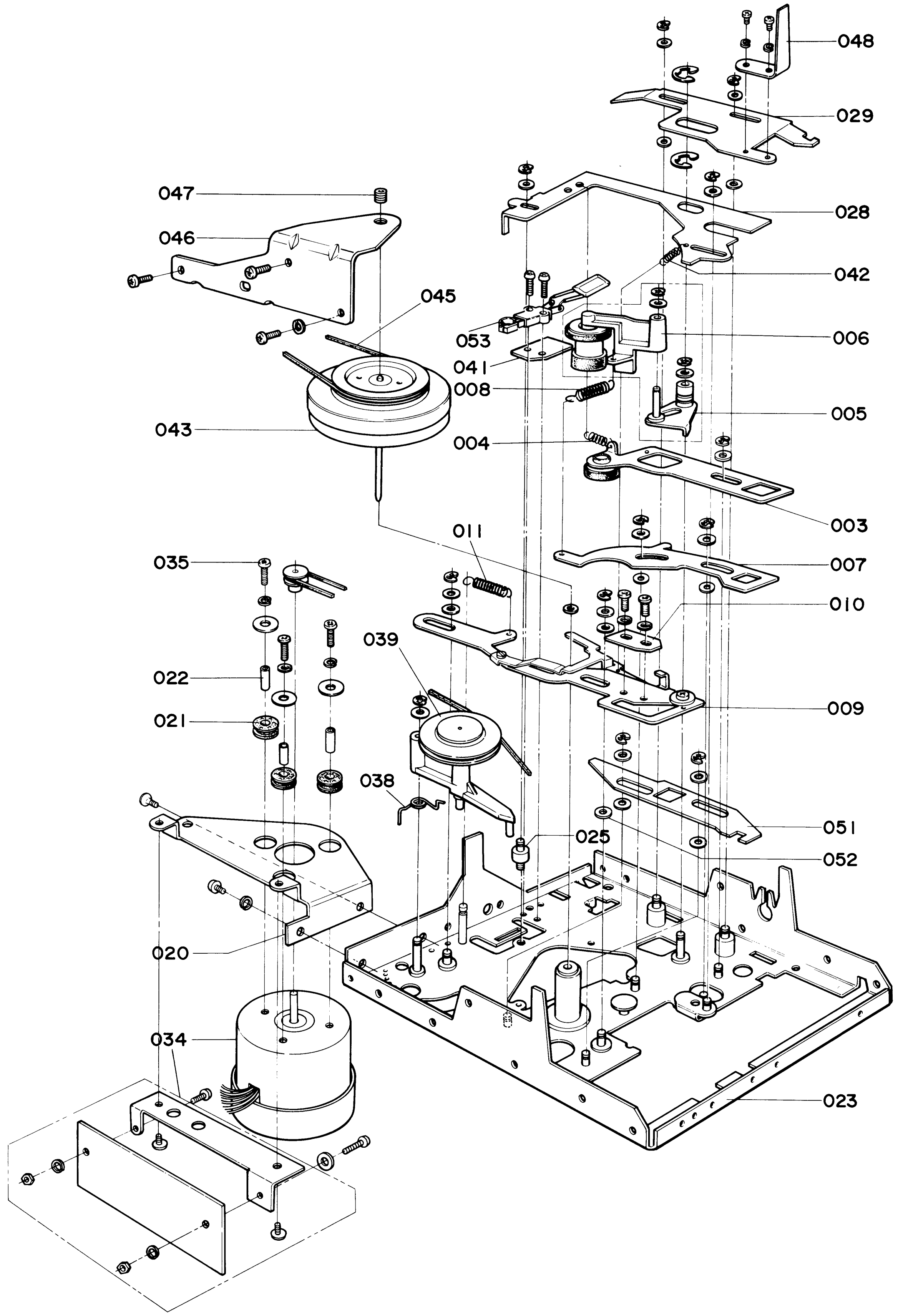

048
029
047
046
028
042
045
006
053
041
008
005
043
004
003
011
007
035
010
039
022
009
021
038
051
025
052
020
034
023

Figure 12 MECHANISM EXPLODED BOTTOM VIEW

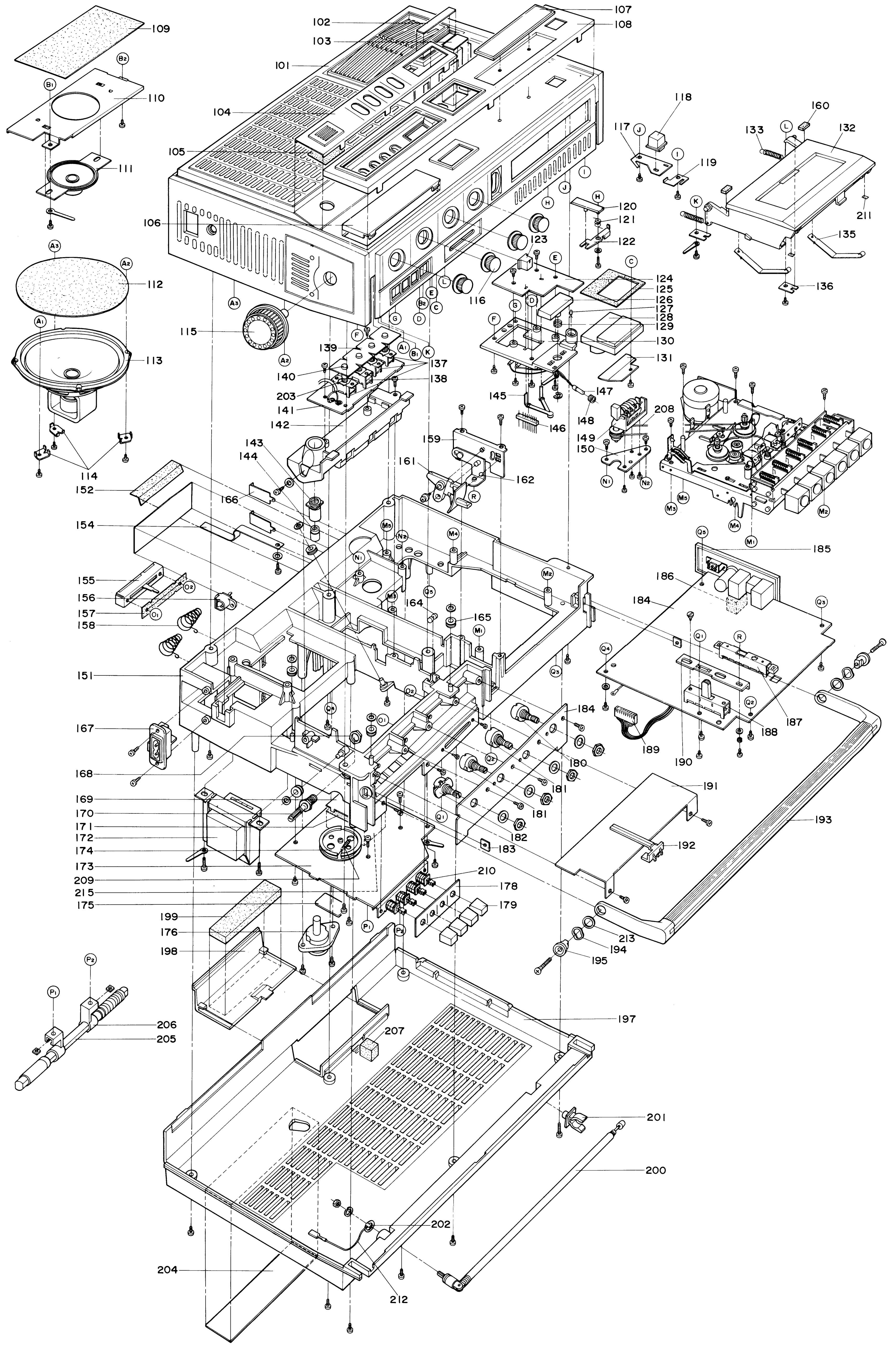

107
108
102
103
101
109
110
104
105
111
106
118
117
119
133
160
132
120
121
122
123
211
135
112
124
125
126
127
128
129
130
131
136
116
115
113
139
137
138
140
203
141
142
145
147
148
146
208
149
150
143
144
159
161
162
114
152
166
154
185
186
184
155
156
157
158
164
165
151
167
168
184
180
181
181
182
183
189
190
188
187
191
192
193
169
170
171
172
174
173
209
215
175
210
178
179
199
176
198
213
194
195
206
205
197
207
201
200
202
204
212

Figure 13 CABINET EXPLODED VIEW (GF-4000H)

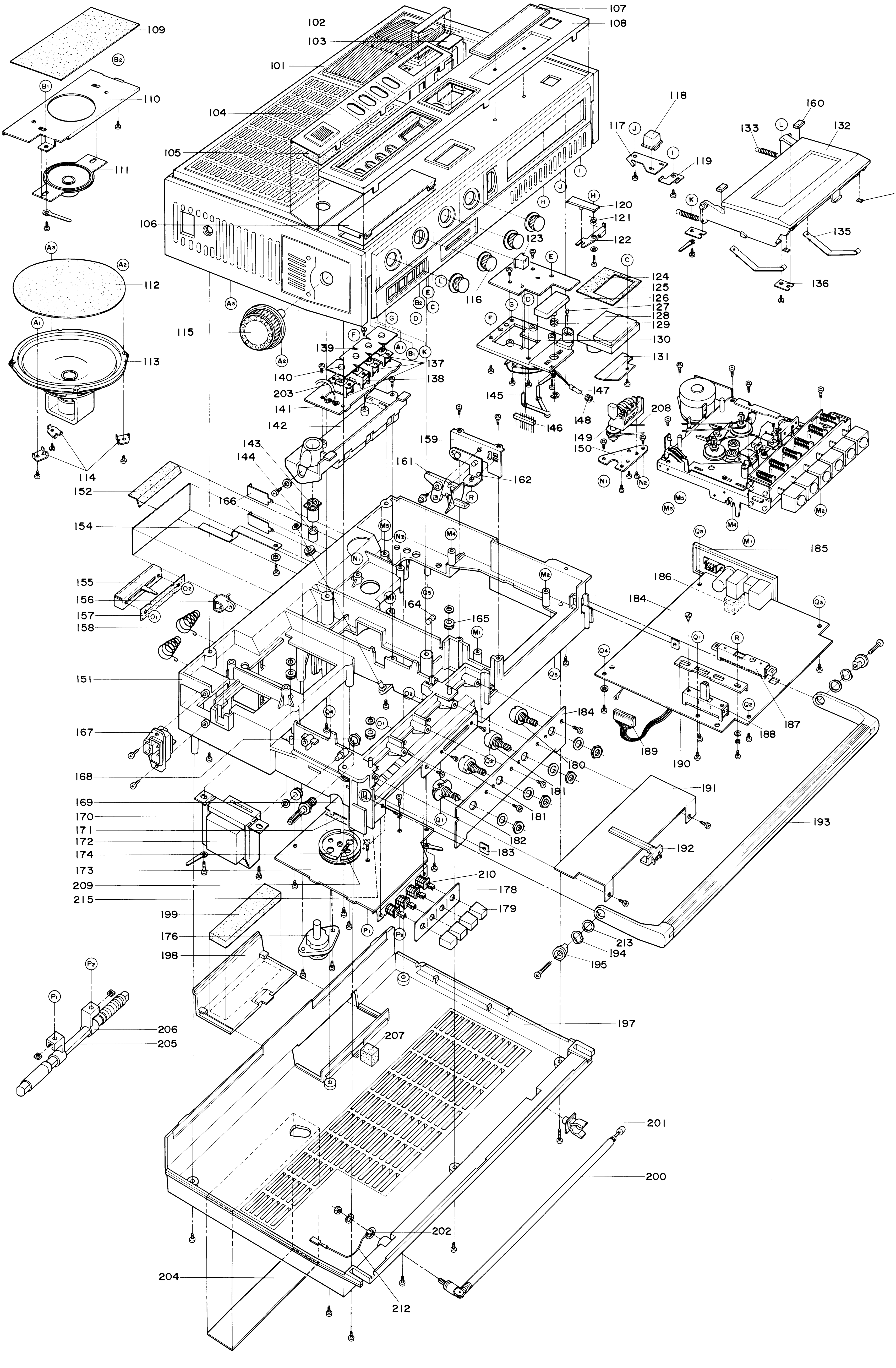

107
108
102
103
101
109
110
104
105
111
106
118
160
117
119
133
132
211
120
121
122
135
136
123
112
116
124
125
126
127
128
129
130
131
115
113
139
137
140
138
203
141
145
147
148
146
142
208
149
150
143
144
159
161
162
114
152
166
154
185
155
156
157
158
186
184
164
165
151
187
188
189
190
167
168
180
181
169
170
171
172
174
173
209
215
182
183
191
192
193
210
178
179
199
176
198
213
194
195
197
206
205
207
201
200
202
204
212

Figure 14 CABINET EXPLODED VIEW (GF-4010X)

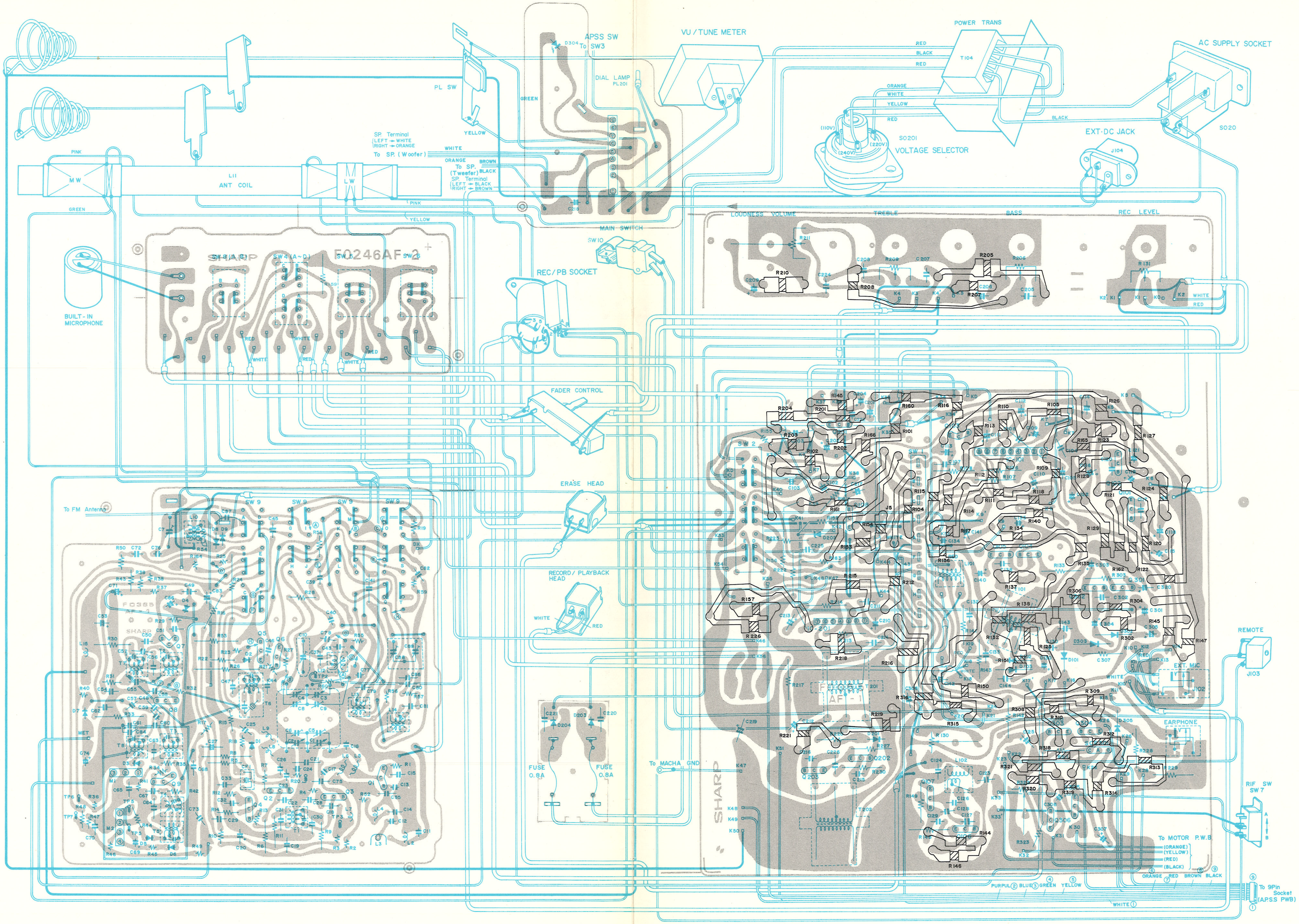
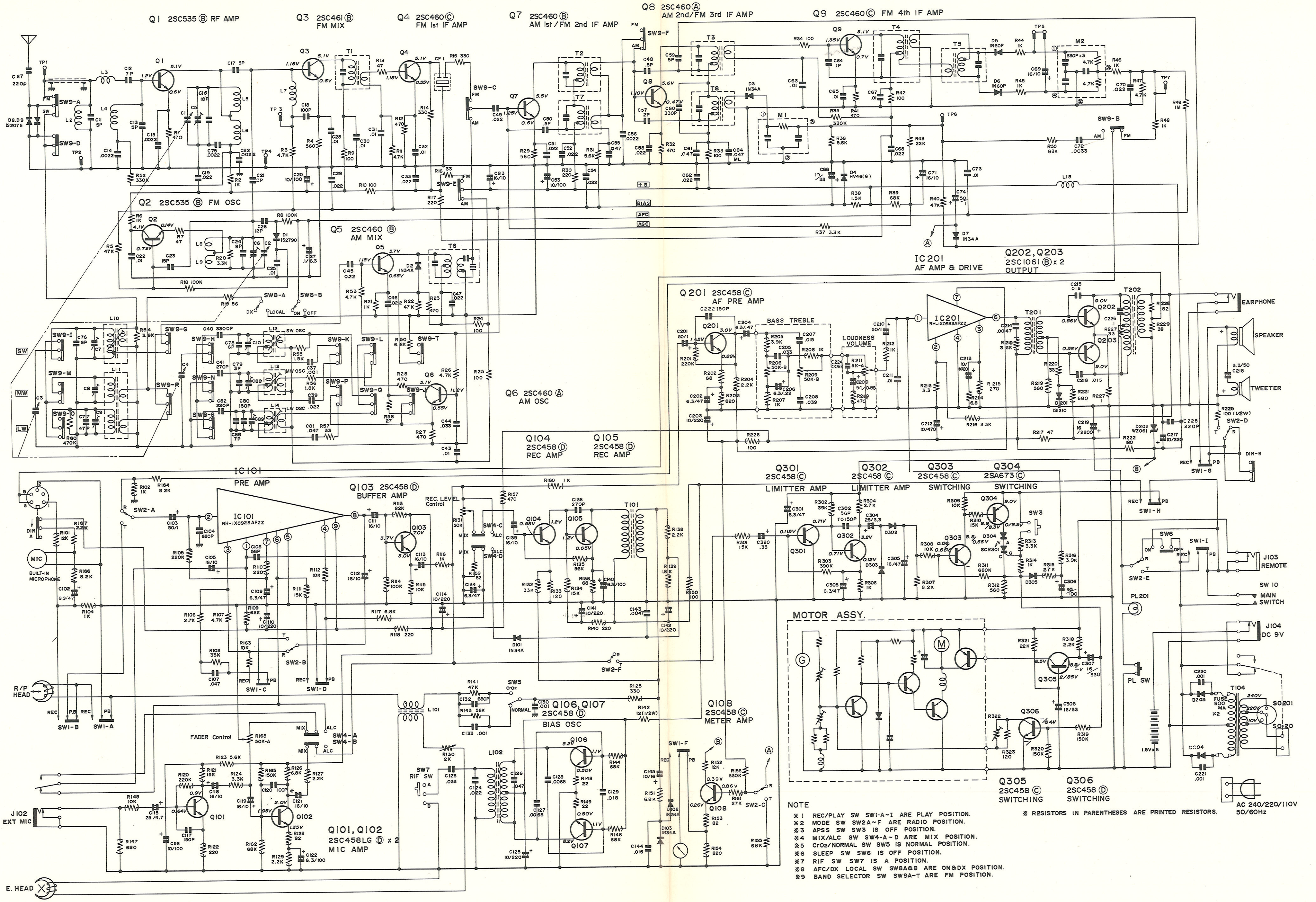

APSS SW
D304
To SW3
VU / TUNE METER
POWER TRANS
T104
AC SUPPLY SOCKET
S020
RED
BLACK
RED
ORANGE
WHITE
YELLOW
RED
BLACK
DIAL LAMP
PL201
PL SW
GREEN
YELLOW
(110V)
(220V)
(240V)
S0201
VOLTAGE SELECTOR
EXT-DC JACK
J104
SP Terminal
(LEFT → WHITE
(RIGHT → ORANGE
To SP. (Woofer)
WHITE
ORANGE
BROWN
To SP. (Tweeter)
BLACK
SP Terminal
(LEFT → BLACK
(RIGHT → BROWN
PINK
MW
L11
ANT COIL
LW
GREEN
PINK
YELLOW
C218
MAIN SWITCH
SW10
LOUDNESS
VOLUME
TREBLE
BASS
REC LEVEL
R211
R210
R209
R208
R205
R206
R207
R131
WHITE
RED
BUILT-IN MICROPHONE
SHARP
SW4 (A~D)
FO246AF-2
SW 3
RED
WHITE
REC/PB SOCKET
FADER CONTROL
ERASE HEAD
RECORD / PLAYBACK HEAD
WHITE
RED
To FM Antenna
SW 9
FO365
SHARP
C221
D203
C220
D204
FUSE 0.8A
FUSE 0.8A
To MACHA GND
SHARP
SW 2
R204
R201
R203
R202
R157
R226
R218
R216
R217
R219
R221
R160
R116
R110
R105
R126
R127
R124
R120
R122
R145
R147
REMOTE
J103
EXT. MIC
EARPHONE
R309
R310
R312
R313
R314
R318
R319
R320
R321
R323
R144
R146
RIF SW
SW 7
To MOTOR P.W.B
(ORANGE)
(YELLOW)
(RED)
(BLACK)
ORANGE
RED
BROWN
BLACK
PURPUL
BLUE
GREEN
YELLOW
WHITE
To 9Pin Socket
(APSS PWB)

Figure 15 WIRING SIDE OF P.W. BOARD (GF-4000H)


Q1 2SC535 Ⓑ RF AMP
Q3 2SC461Ⓑ FM MIX
Q4 2SC460Ⓒ FM Ist IF AMP
Q7 2SC460Ⓑ AM Ist/FM 2nd IF AMP
Q8 2SC460Ⓐ AM 2nd/FM 3rd IF AMP
Q9 2SC460Ⓒ FM 4th IF AMP
Q2 2SC535 Ⓑ FM OSC
Q5 2SC460 Ⓑ AM MIX
Q6 2SC460 Ⓐ AM OSC
IC201 AF AMP & DRIVE
Q202, Q203 2SC1061 Ⓑ x 2 OUTPUT
Q201 2SC458 Ⓒ AF PRE AMP
BASS TREBLE
LOUDNESS VOLUME
EARPHONE
SPEAKER
TWEETER
DIN-B
Q104 2SC458 Ⓓ REC AMP
Q105 2SC458 Ⓓ REC AMP
IC101 PRE AMP
Q103 2SC458 Ⓓ BUFFER AMP
REC LEVEL Control
Q301 2SC458 Ⓒ LIMITTER AMP
Q302 2SC458 Ⓒ LIMITTER AMP
Q303 2SC458 Ⓒ SWITCHING
Q304 2SA673 Ⓒ SWITCHING
J103 REMOTE
SW 10 MAIN SWITCH
J104 DC 9V
MOTOR ASSY.
PL SW
Q305 2SC458 Ⓒ SWITCHING
Q306 2SC458 Ⓓ SWITCHING
AC 240/220/110V 50/60Hz
BUILT-IN MICROPHONE
R/P HEAD
J102 EXT MIC
E. HEAD
FADER Control
Q101, Q102 2SC458LG Ⓓ x 2 MIC AMP
Q106, Q107 2SC458 Ⓓ BIAS OSC
Q108 2SC458 Ⓒ METER AMP
SW7 RIF SW
1.5V x 6

NOTE
※1 REC/PLAY SW SW1-A~I ARE PLAY POSITION.
※2 MODE SW SW2A~F ARE RADIO POSITION.
※3 APSS SW SW3 IS OFF POSITION.
※4 MIX/ALC SW SW4-A~D ARE MIX POSITION.
※5 CrO2/NORMAL SW SW5 IS NORMAL POSITION.
※6 SLEEP SW SW6 IS OFF POSITION.
※7 RIF SW SW7 IS A POSITION.
※8 AFC/DX LOCAL SW SW8A&B ARE ON&DX POSITION.
※9 BAND SELECTOR SW SW9A~T ARE FM POSITION.

※ RESISTORS IN PARENTHESES ARE PRINTED RESISTORS.

Specifications or wiring diagrams of this model are subject to change for the improvement without prior notice.

Figure 16 SCHEMATIC DIAGRAM (GF-4000H)

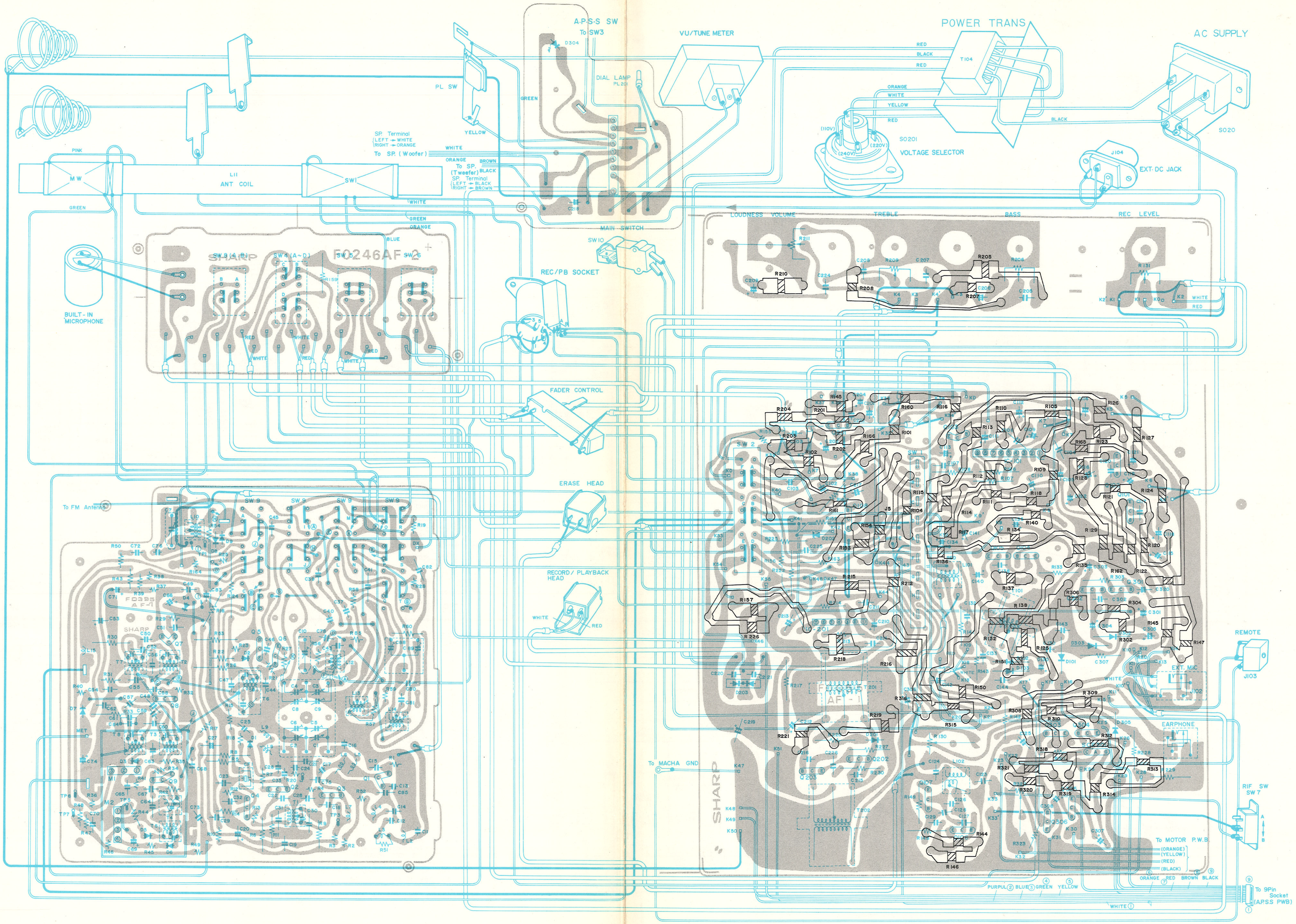
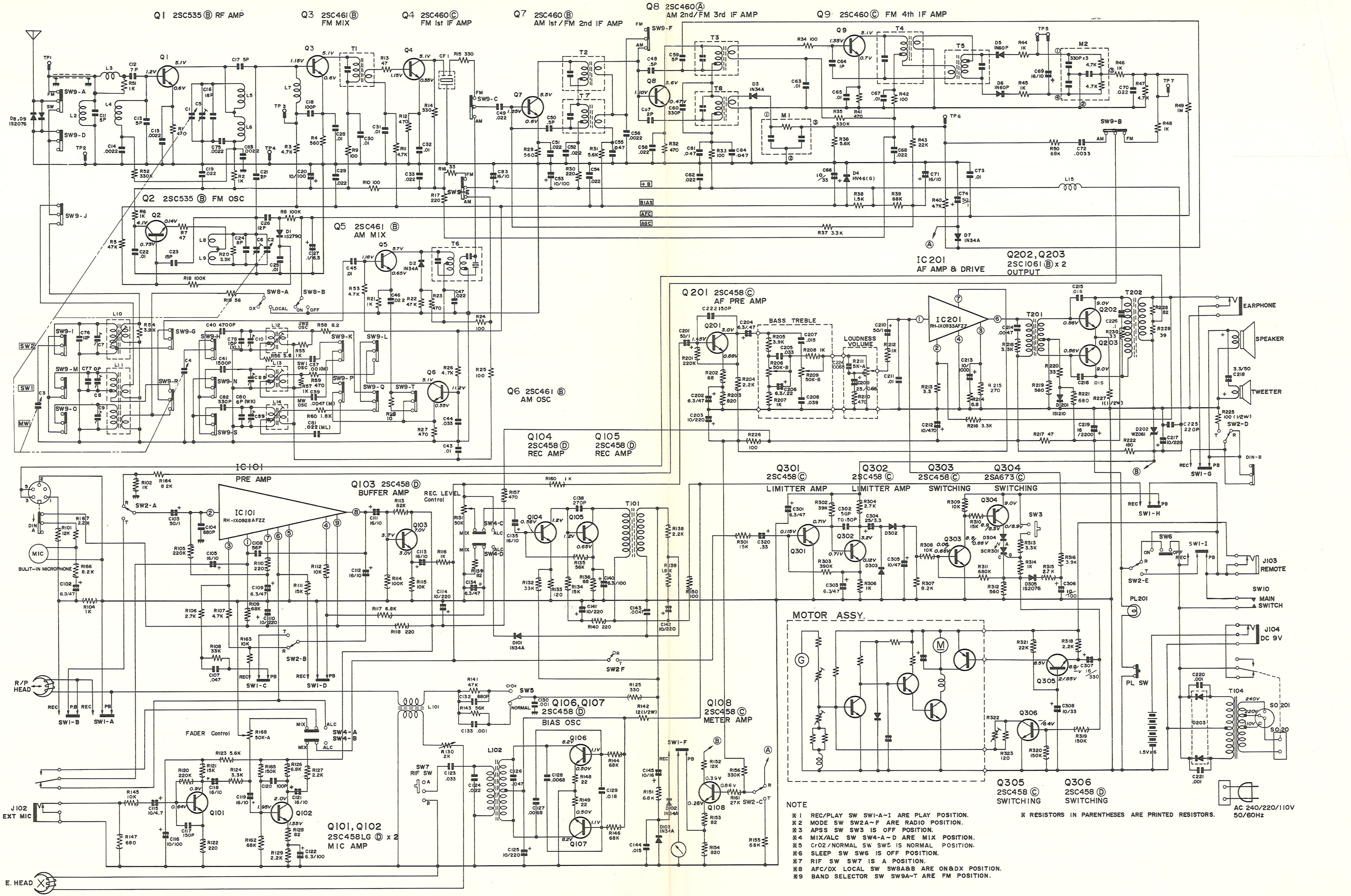

A·P·S·S SW
To SW3
D304
DIAL LAMP
PL201
VU/TUNE METER
POWER TRANS
T104
RED
BLACK
RED
ORANGE
WHITE
YELLOW
RED
AC SUPPLY
SO20
BLACK
(110V)
(240V)
(220V)
SO201
VOLTAGE SELECTOR
J104
EXT· DC JACK
PL SW
YELLOW
GREEN
SP. Terminal
(LEFT → WHITE
(RIGHT → ORANGE
To SP. (Woofer)
WHITE
ORANGE
BROWN
To SP. (Tweeter)
BLACK
SP. Terminal
(LEFT → BLACK
(RIGHT → BROWN
PINK
M W
L11
ANT COIL
SW1
GREEN
WHITE
GREEN
ORANGE
BLUE
MAIN SWITCH
SW10
REC/PB SOCKET
SHARP
SW3(A~F)
SW4(A~D)
FO246AF-2
SW6
BUILT-IN MICROPHONE
RED
WHITE
LOUDNESS
VOLUME
TREBLE
BASS
REC LEVEL
R210
R208
R207
R205
R131
WHITE
RED
FADER CONTROL
ERASE HEAD
RECORD/PLAYBACK HEAD
WHITE
RED
To FM Antenna
SW 9
FO395 AF-1
SHARP
SW 2
REMOTE
J103
EXT. MIC
EARPHONE
RIF SW
SW7
To MACHA GND
SHARP
FO203 AF-1
To MOTOR P.W.B
(ORANGE)
(YELLOW)
(RED)
(BLACK)
ORANGE
RED
BROWN
BLACK
PURPUL
BLUE
GREEN
YELLOW
WHITE
To 9Pin Socket (APSS PWB)

Figure 17 WIRING SIDE OF P.W. BOARD (GF-4010X)


Q1 2SC535 Ⓑ RF AMP
Q3 2SC461 Ⓑ FM MIX
Q4 2SC460 Ⓒ FM 1st IF AMP
Q7 2SC460 Ⓑ AM 1st/FM 2nd IF AMP
Q8 2SC460 Ⓐ AM 2nd/FM 3rd IF AMP
Q9 2SC460 Ⓒ FM 4th IF AMP
Q2 2SC535 Ⓑ FM OSC
Q5 2SC461 Ⓑ AM MIX
Q6 2SC461 Ⓑ AM OSC
IC201 AF AMP & DRIVE
Q202, Q203 2SC1061 Ⓑ x 2 OUTPUT
Q201 2SC458 Ⓒ AF PRE AMP
BASS
TREBLE
LOUDNESS VOLUME
EARPHONE
SPEAKER
TWEETER
Q104 2SC458 Ⓓ REC AMP
Q105 2SC458 Ⓓ REC AMP
IC101 PRE AMP
Q103 2SC458 Ⓓ BUFFER AMP
REC. LEVEL Control
Q301 2SC458 Ⓒ LIMITTER AMP
Q302 2SC458 Ⓒ LIMITTER AMP
Q303 2SC458 Ⓒ SWITCHING
Q304 2SA673 Ⓒ SWITCHING
J103 REMOTE
SW10 MAIN SWITCH
J104 DC 9V
MOTOR ASSY.
BULIT-IN MICROPHONE
MIC
R/P HEAD
FADER Control
Q106, Q107 2SC458 Ⓓ BIAS OSC
Q108 2SC458 Ⓒ METER AMP
SW7 RIF SW
J102 EXT MIC
Q101, Q102 2SC458LG Ⓓ x 2 MIC AMP
E. HEAD
Q305 2SC458 Ⓒ SWITCHING
Q306 2SC458 Ⓓ SWITCHING
PL SW
1.5V x 6
AC 240/220/110V 50/60Hz

NOTE

- ※1 REC/PLAY SW SW1-A~I ARE PLAY POSITION.
- ※2 MODE SW SW2A~F ARE RADIO POSITION.
- ※3 APSS SW SW3 IS OFF POSITION.
- ※4 MIX/ALC SW SW4-A~D ARE MIX POSITION.
- ※5 CrO2/NORMAL SW SW5 IS NORMAL POSITION.
- ※6 SLEEP SW SW6 IS OFF POSITION.
- ※7 RIF SW SW7 IS A POSITION.
- ※8 AFC/DX LOCAL SW SW8A&B ARE ON&DX POSITION.
- ※9 BAND SELECTOR SW SW9A~T ARE FM POSITION.

※ RESISTORS IN PARENTHESES ARE PRINTED RESISTORS.

Specifications or wiring diagrams of this model are subject to change for the improvement without prior notice.

Figure 18 SCHEMATIC DIAGRAM (GF-4010X)

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

TRANSISTORS

REF. NO.	PART NO.	DESCRIPTION	CODE
Q1	VS2SC535-B/-1	FM RF Amp.	AG
Q2	VS2SC535-B/-1	FM OSC	AG
Q3	VS2SC461-B/-1	FM MIX.	AF
Q4	VS2SC460-C/-1	FM 1st IF Amp.	AF
Q5	VS2SC461-B/-1	AM MIX. (GF-4010X)	AF
	VS2SC460-B/-1	AM MIX. (GF-4000H)	AF
Q6	VS2SC461-B/-1	AM OSC (GF-4010X)	AF
	VS2SC460-A/-1	AM OSC (GF-4000H)	AF
Q7	VS2SC460-B/-1	AM 1st/FM 2nd IF Amp.	AF
Q8	VS2SC460-A/-1	AM 2nd/FM 3rd IF Amp.	AF
Q9	VS2SC460-C/-1	FM 4th IF Amp.	AF
Q101	VS2SC458LGD-1	MIC. Amp.	AF
Q102	VS2SC458LGD-1	MIC. Amp.	AF
Q103	VS2SC458-D/-1	Buffer Amp.	AF
Q104	VS2SC458-D/-1	Record Amp.	AF
Q105	VS2SC458-D/-1	Record Amp.	AF
Q106	VS2SC458-D/-1	Bias OSC	AF
Q107	VS2SC458-D/-1	Bias OSC	AF
Q108	VS2SC458-C/-1	Meter Amp.	AF
Q201	VS2SC458-C/-1	AF Pre Amp.	AF
Q202	VS2SC1061-B-3	Power (Matched Pair)	AG
Q203	VS2SC1061-B-3	Power (Matched Pair)	AG
Q301	VS2SC458-C/-1	Limiter Amp.	AF
Q302	VS2SC458-C/-1	Limiter Amp.	AF
Q303	VS2SC458-C/-1	Switching	AF
Q304	VS2SA673-B/-1	Switching	AG
Q305	VS2SC458-C/-1	Switching	AF
Q306	VS2SC458-D/-1	Switching	AF

CERAMIC FILTER

REF. NO.	PART NO.	DESCRIPTION	CODE
CF1	RFILF0009AFZZ	10.7MHz, 2nd IF	AE

TRANSFORMERS

REF. NO.	PART NO.	DESCRIPTION	CODE
T1	RCILI0157AFZZ	FM 1st IF	AE
T2	RCILI0157AFZZ	FM 2nd IF	AE
T3	RCILI0157AFZZ	FM 3rd IF	AE
T4	RCILI0183AFZZ	FM Discriminator	AE
T5	RCILI0182AFZZ	FM Discriminator	AE
T6	RCILA0006AFZZ	AM MIX.	AG
T7	RCILI0179AFZZ	AM 1st IF	AD
T8	RCILI0170AFZZ	AM 2nd IF	AD
T101	RTRNI0065AFZZ	Record	AF
T104	RTRNP0379AFZZ	Power (GF-4010X)	AU
(172)	RTRNP0363AFZZ	Power (GF-4000H)	AV
T201	RTRNI0030AGZZ	Input	AH
T202	RTRNS0032AGZZ	Output	AF

INTEGRATED CIRCUITS

REF. NO.	PART NO.	DESCRIPTION	CODE
IC101	RH-IX0928AFZZ	Pre Amp.	AH
IC201	RH-IX0933AFZZ	AF Amp.	AK

COILS

REF. NO.	PART NO.	DESCRIPTION	CODE
L2	RCILC0018AFZZ	Trap	AA
L3	RCILC0019AFZZ	FM Antenna	AA
L4	RCILC0018AFZZ	FM Antenna Choke	AA
L5	RCILR0112AFZZ	FM RF	AA
L6	RCILR0112AFZZ	FM RF	AA
L7	RCILC0030AFZZ	FM Emitter Choke	AC
L8	RCILR0089AFZZ	FM OSC	AA
L9	RCILR0089AFZZ	FM OSC	AA
L10	RCILA0358AFZZ	SW2 (GF-4010X) Antenna	AF
	RCILA0255AFZZ	SW (GF-4000H) Antenna	AE
L11	RCILA0357AFZZ	SW1, MW (GF-4010X) Antenna	AE
	RCILA0353AFZZ	LW, MW (GF-4000H) Antenna	AD
L12	RCILB0309AFZZ	SW2 (GF-4010X) OSC	AE
	RCILB0309AFZZ	SW (GF-4000H) OSC	AE
L13	RCILB0357AFZZ	SW1 (GF-4010X) OSC	AE
	RCILB0292AFZZ	MW (GF-4000H) OSC	AD
L14	RCILB0292AFZZ	MW (GF-4010X) OSC	AD
	RCILB0353AFZZ	LW (GF-4000H) OSC	AD
L15	RCILF0014AGZZ	FM RF Choke	AC
L101	RCILB0087AGZZ	Record	AF
L102	RCILB0354AFZZ	Bias OSC	AE

PACKAGED CIRCUITS

REF. NO.	PART NO.	DESCRIPTION	CODE
M1	RMPTA0011AFZZ	470 ohm + .02MFD × 2	AC
M2	RMPTA0084AFZZ	4.7K ohm × 2 + 330PF × 3	AC

DIODES

REF. NO.	PART NO.	DESCRIPTION	CODE
D1	VHC1S2790-Y-1	FM AFC	AD
D2	VHD1N34A///-1	Overload	AC
D3	VHD1N34A///-1	Detector AGC	AC
D4	VHVHV46-G//-1	Bias Stabilizer	AD
D5	VHD1N60////-2	FM Detector (Matched Pair)	AH
D6	VHD1N60////-3	FM Detector (Matched Pair)	AH
D7	VHD1N34A///-1	Meter, Rectifier	AC
D8	VHD1S2976//-1	Static Protector	AG
D9	VHD1S2076//-1	Static Protector	AG
D101	VHD1N34A///-1	ALC	AC
D102	VHD1N34A///-1	Record METER	AC
D103	VHD1N34A///-1	Record METER	AC
D201	VHV1S1210-MIF	Thermal Compensation	AC
D202	VHEWZ061///-1	Bias stabilizer	AE
D203	RH-DX0003SEZZ	Silicon Rectifier, Power (GF-4010X)	AE
	RH-DX0029AGZZ	Silicon Rectifier, Power (GF-4000H)	AC
D204	RH-DX0029AGZZ	Silicon Rectifier, Power (GF-4000H)	AC
SCR301	VHSSCR1////1S	Thyristor	AQ
D302	VHD1N60////-1	A.P.S.S	AC
D303	VHD1N60////-1	A.P.S.S	AC
D304	VHPREDLIT503F	Light Emitting	AV
D305	VHD1S2076//-1	A.P.S.S.	AG

RESISTORS

(Unless otherwise specified are 1/4W, ±10%, Carbon type.)

REF. NO.	PART NO.	DESCRIPTION	CODE
R1	VRD-SU2EY471K	470 ohm	AA
R2	VRD-SU2EY102K	1K ohm	AA
R3	VRD-SU2EY472K	4.7K ohm	AA
R4	VRD-SU2EY561K	560 ohm	AA
R5	VRD-SU2EY473K	47K ohm	AA
R6	VRD-SU2EY102K	1K ohm	AA
R7	VRD-SU2EY470K	47 ohm	AA
R8	VRD-ST2EY104K	100K ohm	AA
R9	VRD-SU2EY101K	100 ohm	AA
R10	VRD-SU2EY101K	100 ohm	AA
R11	VRD-SU2EY472K	4.7K ohm	AA
R12	VRD-SU2EY471K	470 ohm	AA
R13	VRD-SU2EY470K	47 ohm	AA
R14	VRD-SU2EY331K	330 ohm	AA
R15	VRD-SU2EY331K	330 ohm	AA
R16	VRD-ST2EY330K	33 ohm	AA
R17	VRD-SU2EY221K	220 ohm	AA
R18	VRD-SU2EY104K	100K ohm	AA
R19	VRD-SU2EY560K	56 ohm	AA
R20	VRD-SU2EY332K	3.3K ohm	AA
R21	VRD-SU2EY102K	1K ohm	AA
R22	VRD-SU2EY473K	47K ohm	AA
R23	VRD-SU2EY471K	470 ohm	AA
R24	VRD-ST2EY101K	100 ohm	AA
R25	VRD-SU2EY101K	100 ohm	AA
R26	VRD-ST2EY472K	4.7K ohm	AA
R27	VRD-SU2EY471K	470 ohm	AA
R28	VRD-SU2EY471K	470 ohm	AA
R29	VRD-SU2EY561K	560 ohm	AA
R30	VRD-ST2EY221K	220 ohm	AA
R31	VRD-SU2EY562K	5.6K ohm	AA
R32	VRD-SU2EY471K	470 ohm	AA
R33	VRD-ST2EY101K	100 ohm	AA
R34	VRD-SU2EY101K	100 ohm	AA
R35	VRD-SU2EY334K	330K ohm	AA
R36	VRD-SU2EY562K	5.6K ohm	AA
R37	VRD-SU2EY332K	3.3K ohm	AA
R38	VRD-SU2EY152K	1.5K ohm	AA
R39	VRD-SU2EY683K	68K ohm	AA
R40	VRD-SU2EY473K	47K ohm	AA
R41	VRD-SU2EY471K	470 ohm	AA
R42	VRD-SU2EY101K	100 ohm	AA
R43	VRD-SU2EY223K	22K ohm	AA
R44	VRD-SU2EY102K	1K ohm	AA
R45	VRD-SU2EY102K	1K ohm	AA
R46	VRD-SU2EY102K	1K ohm	AA
R47	VRD-SU2EY472K	4.7K ohm	AA
R48	VRD-SU2EY102K	1K ohm	AA
R49	VRD-SU2EY105K	1Meg ohm	AA
R50	VRD-SU2EY683K	68K ohm	AA
R51	VRD-ST2EY102K	1K ohm (GF-4010X)	AA
R52	VRD-SU2EY334K	330K ohm	AA
R53	VRD-ST2EY472K	4.7K ohm	AA
R54	VRD-SU2EY392K	3.9K ohm	AA
R55	VRD-SU2EY102K	1K ohm (GF-4010X)	AA
	VRD-SU2EY152K	1.5K ohm (GF-4000H)	AA
R56	VRD-SU2EY5R6K	5.6 ohm (GF-4010X)	AA
	VRD-SU2EY182K	1.8K ohm (GF-4000H)	AA
R57	VRD-ST2EY102K	1K ohm (GF-4010X)	AA
	VRD-SU2EY330K	33 ohm (GF-4000H)	AA
R58	VRD-SU2EY8R2K	8.2 ohm (GF-4010X)	AA
	VRD-SU2EY270K	27 ohm (GF-4000H)	AA
R59	VRD-SU2EY471K	470 ohm (GF-4010X)	AA
	VRD-SU2EY682K	6.8K ohm (GF-4000H)	AA
R60	VRD-SU2EY182K	1.8K ohm (GF-4010X)	AA
	VRD-ST2EY474K	470K ohm (GF-4000H)	AA
R106	VRD-ST2EY272K	2.7K ohm	AA
R107	VRD-ST2EY472K	4.7K ohm	AA
R108	VRD-ST2EY333K	33K ohm	AA
R130	RVR-M0100AFZZ	2K ohm, Bias Current Adjust	AC
R131 (180)	RVR-A0042AFZZ	50K ohm REC. LEVEL Control	AF
R133	VRD-ST2EY121K	120 ohm	AA
R141	VRD-ST2EY473K	47K ohm	AA
R142	VRD-ST2HA120J	12 ohm, 1/2W, 5%, Carbon	AA
R143	VRD-ST2EY563K	56K ohm	AA
R148	VRD-ST2EY220K	22 ohm	AA
R149	VRD-ST2EY220K	22 ohm	AA
R152	VRD-SU2EY123K	12K ohm	AA
R155	VRD-SU2EY683K	68K ohm	AA
R156	VRD-ST2EY334K	330K ohm (GF-4010X)	AA
R159	VRD-ST2EY820K	82 ohm	AA
R163	VRD-ST2EY103K	10K ohm	AA
R164	VRD-SU2EY823K	82K ohm	AA
R167	VRD-ST2EY222K	2.2K ohm	AA
R168 (155)	RVR-Z0041AGZZ	50K ohm, FADER Control	AG
R206 (181)	RVR-B0046AFZZ	50K ohm, BASS Control	AF
R209 (181)	RVR-B0046AFZZ	50K ohm, TREBLE Control	AF
R211 (182)	RVR-B0026AFZZ	5K ohm, VOLUME Control	AF

REF. NO.	PART NO.	DESCRIPTION	CODE
R213	VRD-ST2EY3R3K	3.3 ohm	AA
R214	VRD-ST2EY6R8K	6.8 ohm	AA
R217	VRD-ST2EY470K	47 ohm	AA
R220	VRD-ST2EY330K	33 ohm	AA
R222	VRD-ST2EY181K	180 ohm	AA
R225	VRD-ST2HA101K	100 ohm, 1/2W, 10%, Carbon	AA
R227	VRD-ST2HA1R0K	1 ohm, 1/2W, 10%, Carbon	AA
R228	VRD-ST2EY820K	82 ohm	AA
R229	VRD-ST2EY390K	39 ohm	AA
R230	VRD-ST2EY330K	33 ohm	AA
R303	VRD-ST2EY394K	390K ohm	AA
R307	VRD-ST2EY822K	8.2K ohm	AA
R311	VRD-ST2EY684K	680K ohm	AA
R322	RVR-B4010SEZZ	500 ohm, Motor Bias Adjust	AC
R323	VRD-SU2EY121K	120 ohm	AA

CAPACITORS

REF. NO.	PART NO.	DESCRIPTION	CODE
C1, C2, C3, C4, C5, C6, C8, C9	RVC-R0022AFZZ (GF-4010X)	Variable Tuning Gang with Trimmers C5: FM RF Trimmer C6: FM OSC Trimmer C8: MW (GF-4000H) SW1 (GF-4010X) Antenna Trimmer C9: LW (GF-4000H) MW (GF-4010X) Antenna Trimmer	AS
	RVC-R0050AFZZ (GF-4000H)		AR
C7, C10	RTO-H1004AFZZ	Trimmer C7: SW (GF-4000H) SW2 (GF-4010X) Antenna	AC
		C10: SW (GF-4000H) SW2 (GF-4010X) OSC	AC
C11	VCCSPU1HL5R0C	5PF, 50V, .25PF, Ceramic	AA
C12	VCCSPU1HL7R0D	7PF, 50V, .5PF, Ceramic	AA
C13	VCCSPU1HL5R0C	5PF, 50V, .25PF, Ceramic	AA
C14	VCKZPU1HF222Z	.0022MFD, 50V, +80 −20%, Ceramic (GF-4010X)	AA
	VCKYPU1HB222M	.0022MFD, 50V, 20%, Ceramic (GF-4000H)	AA
C15	VCKZPU1HF222Z	.0022MFD, 50V, +80 −20%, Ceramic (GF-4010X)	AA
	VCKYPU1HB222M	.0022MFD, 50V, 20%, Ceramic (GF-4000H)	AA
C16	VCCSPU1HL180J	18PF, 50V, 5%, Ceramic	AA
C17	VCCSPU1HL5R0C	5PF, 50V, .25PF, Ceramic	AA
C18	VCCSBU1HL101J	100PF, 50V, 5%, Ceramic	AA
C19	VCKZPU1HF223Z	.022MFD, 50V, +80 −20%, Ceramic	AA
C20	VCEAAU1AW107Q	100MFD, 10V, +100 −10%, Electrolytic	AC
C21	VCCCPU1HH2R0C	2PF, 50V, .25PF, Ceramic	AB
C22	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar	AB
C23	VCCCPU1HH150J	15PF, 50V, 5%, Ceramic	AB
C24	VCCVPU1HK8R0J	8PF, 50V, 5%, Ceramic	AA
C25	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar	AB
C26	VCCTPU1HH120J	12PF, 50V, 5%, Ceramic (GF-4010X)	AA
	VCCUPU1HJ120J	12PF, 50V, 5%, Ceramic (GF-4000H)	AA
C27	VCAAKU0XA104M	.1MFD, 6.0V, 20%, Electrolytic	AD
C28	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar	AB
C29	VCKZPU1HF223Z	.022MFD, 50V, +80 −20%, Ceramic	AA
C30	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar	AB
C31	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar	AB
C32	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar	AB
C33	VCKZPU1HF223Z	.022MFD, 50V, +80 −20%, Ceramic	AA
C37	VCKYPU1HB102M	.001MFD, 50V, 20%, Ceramic (GF-4010X)	AA
	VCQYKU1HM102M	.001MFD, 50V, 20%, Mylar Ceramic (GF-4010X)	AB
C39	VCKYPU1HB472M	.0047MFD, 50V, 20%, Ceramic (GF-4010X)	AA
	VCQYKU1HM223M	.022MFD, 50V, 20%, Mylar (GF-4000H)	AB
C40	VCQSMT1HS472J	4700PF, 50V, 5%, Styrene (GF-4010X)	AC
	VCQSMT1HS332J	3300PF, 50V, 5%, Styrene (GF-4000H)	AB
C41	VCQSMT1HS152J	1500PF, 50V, 5%, Styrene (GF-4010X)	AC
	VCCSBU1HL271J	270PF, 50V, 5%, Ceramic (GF-4000H)	AA
C43	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar	AB
C44	VCQYKU1HM333M	.033MFD, 50V, 20%, Mylar	AB
C45	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar (GF-4010X)	AB
	VCQYKU1HM223M	.022MFD, 50V, 20%, Mylar (GF-4000H)	AB
C46	VCQYKU1HM223M	.022MFD, 50V, 20%, Mylar	AB
C47	VCQYKU1HM223M	.022MFD, 50V, 20%, Mylar	AB
C48	VCCSPU1HLR50C	.5PF, 50V, .25PF, Ceramic	AB
C49	VCQYKU1HM223M	.022MFD, 50V, 20%, Mylar	AB
C50	VCCSPU1HLR50C	.5PF, 50V, .25PF, Ceramic	AB
C51	VCQYKU1HM223M	.022MFD, 50V, 20%, Mylar	AB
C52	VCQYKU1HM223M	.022MFD, 50V, 20%, Mylar	AB
C53	VCEAAU1AW107Q	100MFD, 10V, +100 −10%, Electrolytic	AC
C54	VCKZPU1HF223Z	.022MFD, 50V, +80 −20%, Ceramic	AA
C55	VCQYKU1HM473M	.047MFD, 50V, 20%, Mylar	AC
C56	VCQYKU1HM222M	.0022MFD, 50V, 20%, Mylar	AB
C57	VCCSPU1HL2R0C	2PF, 50V, .25PF, Ceramic	AA
C58	VCQYKU1HM223M	.022MFD, 50V, 20%, Mylar	AB
C59	VCCSPU1HL5R0C	5PF, 50V, .25PF, Ceramic	AA
C60	VCCSBU1HL331J	330PF, 50V, 5%, Ceramic	AA
C61	VCQYKU1HM473K	.047MFD, 50V, 10%, Mylar	AC
C62	VCKZPU1HF223Z	.022MFD, 50V, +80 −20%, Ceramic	AA
C63	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar	AB
C64	VCCSPU1HL1R0C	1PF, 50V, .25PF, Ceramic	AA
C65	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar	AB
C66	VCEAAU1AW336Q	33MFD, 10V, +100 −10%, Electrolytic	AC
C67	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar	AB

REF. NO.	PART NO.	DESCRIPTION	CODE
C68	VCKZPU1HF223Z	.022MFD, 50V, +80 −20%, Mylar	AA
C69	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AD
C70	VCQYKU1HM223M	.022MFD, 50V, 20%, Mylar	AB
C71	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AD
C72	VCQYKU1HM332M	.0033MFD, 50V, 20%, Mylar	AB
C73	VCQYKU1HM103M	.01MFD 50V, 20%, Mylar	AB
C74	VCEAAU1HW105R	1MFD, 50V, +150 −10%, Electrolytic	AB
C75	VCKZPU1HF222Z	.0022MFD, 50V, +80 −20%, Ceramic (GF-4010X)	AA
	VCKYPU1HB222M	.0022MFD, 50V, 20%, Ceramic (GF-4000H)	AA
C76	VCCSPU1HL120J	12PF, 50V, 5%, Ceramic (GF-4010X)	AA
	VCCSPU1HL6R0D	6PF, 50V, .5PF, Ceramic (GF-4000H)	AA
C77	VCCSBU1HL470J	47PF, 50V, 5%, Ceramic	AA
C78	VCCXPU1HL100F	10PF, 50V, 1PF, Ceramic (GF-4010X)	AB
	VCCXPU1HL6R0D	6PF, 50V, .6PF, Ceramic (GF-4000H)	AB
C79	VCCXPU1HL3R0D	3PF, 50V, .5PF, Ceramic	AB
C80	VCCWPU1HK6R0C	6PF, 50V, .25PF, Ceramic (GF-4010X)	AB
	VCQSMT1HS151J	150PF, 50V, 5%, Styrene (GF-4000H)	AB
C81	VCQYKU1HM223M	.022MFD, 50V, 20%, Mylar (GF-4010X)	AB
	VCQYKU1HM473M	.047MFD, 50V, 20%, Mylar (GF-4000H)	AC
C82	VCQSMT1HS331J	330PF, 50V, 5%, Styrene (GF-4010X)	AB
	VCQSMT1HS221J	220PF, 50V, 5%, Styrene (GF-4000H)	AB
C83	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AC
C84	VCQYKU1HM473K	.047MFD, 50V, 10%, Mylar	AC
C85	VCKZPU1HF222Z	.0022MFD, 50V, +80 −20%, Ceramic (GF-4010X)	AA
	VCKYPU1HB222M	.0022MFD, 50V, 20%, Ceramic (GF-4000H)	AB
C86	VCCSPU1HL7R0D	7PF, 50V, .5PF, Ceramic	AA
C87	VCKSPU2GL221M	220PF, 400V, 20%, Ceramic (GF-4000H)	AD
C88	RTO-H2033AGZZ	Trimmer MW (GF-4000H) SW1 (GF-4010X) OSC	AE
C89	RTO-H2033AGZZ	Trimmer LW (GF-4000H) MW (GF-4010X) OSC	AE
C102	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AD
C103	VCEAAU1HW105R	1MFD, 50V, +150 −10%, Electrolytic	AD
C104	VCCSBU1HL681J	680PF, 50V, 5%, Ceramic	AA
C105	VCEAAU0JW476Q	47MFD, 6.3V, +100 −10%, Electrolytic	AD
C107	VCQYKU1HM473K	.047MFD, 50V, 10%, Mylar	AC
C108	VCCSBU1HL560J	56PF, 50V, 5%, Ceramic	AA
C109	VCEAAU0JW476Q	47MFD, 6.3V, +100 −10%, Electrolytic	AC
C110	VCEAAU1AW227Q	220MFD, 10V, +100 −10% Electrolytic	AD
C111	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AD
C112	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AD
C113	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AD
C114	VCEAAU1AW227Q	220MFD, 10V, +100 −10%, Electrolytic	AD
C115	VCEAAU1EW475R	4.7MFD, 25V, +150 −10%, Electrolytic	AB
C116	VCEAAU1AW107Q	100MFD, 10V, +100 −10%, Electrolytic	AC
C117	VCCSBU1HL151J	150PF, 50V, 5%, Ceramic	AA
C118	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AD
C119	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AD
C120	VCCSBU1HL101J	100PF, 50V, 5%, Ceramic	AA
C121	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AD
C122	VCEAAU0JW107Q	100MFD, 6.3V, +100 −10%, Electrolytic	AC
C123	VCQYKU1HM333K	.033MFD, 50V, 10%, Mylar	AB
C124	VCQYKU1HM223J	.022MFD, 50V, 5%, Mylar	AC
C125	VCEAAU1AW227Q	220MFD, 10V, +100 −10%, Electrolytic	AD
C126	VCQYKU1HM473J	.047MFD, 50V, 5%, Mylar	AC
C127	VCQYKU1HM682J	.0068MFD, 50V, 5%, Mylar	AC
C128	VCQYKU1HM682J	.0068MFD, 50V, 5%, Mylar	AC
C129	VCQYKU1HM183K	.018MFD, 50V, 10%, Mylar	AB
C130	VCQYKU1HM102M	.001MFD, 50V, 20%, Mylar	AB
C132	VCCSBU1HL681J	680PF, 50V, 5%, Ceramic	AA
C133	VCQYKU1HM102M	.001MFD, 50V, 20%, Mylar	AB
C134	VCEAAU0JW476Q	47MFD, 6.3V, +100 −10%, Electrolytic	AC
C135	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AD
C138	VCCSBU1HL271J	270PF, 50V, 5%, Ceramic	AA
C140	VCEAAU0JW107Q	100MFD, 6.3V, +100 −10%, Electrolytic	AC
C141	VCEAAU1AW227Q	220MFD, 10V, +100 −10%, Electrolytic	AD
C142	VCEAAU1AW227Q	220MFD, 10V, +100 −10%, Electrolytic	AD
C143	VCQYKU1HM472M	.0047MFD, 50V, 20%, Mylar	AB
C144	VCQYKU1HM153M	.015MFD, 50V, 20%, Myalr	AB
C145	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic	AD
C201	VCEAAU1HW105R	1MFD, 50V, +150 −10%, Electrolytic	AB
C202	VCEAAU0JW476Q	47MFD, 6.3V, +100 −10%, Electrolytic	AC
C203	VCEAAU1AW227Q	220MFD, 10V, +100 −10%, Electrolytic	AD
C204	VCAAKU0XA474M	.47MFD, 6.0V, 20%, Electrolytic	AC
C205	VCQYKU1HM333M	.033MFD, 50V, 20%, Mylar	AB
C206	VCAAKU0XA224M	.22MFD, 6.0V, 20%, Electrolytic	AC

REF. NO.	PART NO.	DESCRIPTION	CODE
C207	VCQYKU1HM153M	.015MFD, 50V, 20%, Mylar	AB
C208	VCQYKU1HM393M	.039MFD, 50V, 20%, Mylar	AC
C209	VCAAAU1EB684K	.68MFD, 25V, 10%, Aluminum Electrolytic	AD AD
C210	VCEAAU1HW105R	1MFD, 50V, +150 –10%, Electrolytic	AB
C211	VCQYKU1HM103M	.01MFD, 50V, 20%, Mylar	AB
C212	VCEAAU1AW477Q	470MFD, 10V, +100 –10%, Electrolytic	AE
C213	VCEAAU1AW108Q	1000MFD, 10V, +100 –10%, Electrolytic	AE
C214	VCQYKU1HM472M	.015MFD, 50V, ±20%, Mylar	AB
C215 C216	VCQYKU1HM153M	.015MFD, 50V, ±20%, Mylar	AB
C217	VCEAAU1AW227Q	220MFD, 10V, +100 –10%, Electrolytic	AD
C218	VCE9AU1HC335M	3.3MFD, 50V, 20%, Non-Polar Electrolytic	AE
C219	VCEAAU1CW228Q	2200MFD, 16V, +100 –10%, Electrolytic	AG
C220	VCKZPU1HF102Z	.001MFD, 50V, +80 –20%, Ceramic	AA
C221	VCKZPU1HF102Z	.001MFD, 50V, +80 –20%, Ceramic	AA
C222	VCCSBU1HL151J	150PF, 50V, 5%, Ceramic	AA
C224	VCQYKU1HM682M	.0068MFD, 50V, 20%, Mylar	AB
C225	VCCSBU1HL221J	220PF, 50V, 5%, Ceramic	AA
C226	VCQYKU1HM104M	.1MFD, 50V, 20%, Mylar	AC
C227	VCQYKU1HM472M	.0047MFD, 50V, 20%, Mylar	AB
C301	VCEAAU0JW476Q	47MFD, 6.3V, +100 –10%, Electrolytic	AC
C302	VCCSPU1HL151J	150MFD, 50V, 5%, Ceramic	AA
C303	VCEAAU0JW476Q	47MFD, 6.3V, +100 –10%, Electrolytic	AC
C304	VCEAAU1EW335R	3.3MFD, 25V, +150 –10%, Electrolytic	AB
C305	VCEABU1CW476M	47MFD, 16V, 20%, Electrolytic	AD
C306	VCEAAU1AW107Q	100MFD, 10V, +100 –10%, Electrolytic	AC
C307	VCEAAU1CW337Q	330MFD, 16V, +100 –10%, Electrolytic	AD
C308	VCEAAU1CW336Q	33MFD, 16V, +100 –10%, Electrolytic	AC
C320	VCAAKU0XA334M	.33MFD, 6V, 10%, Aluminum Electrolytic	AC

MECHANICAL PARTS

REF. NO.	PART NO.	DESCRIPTION	CODE
001	MLEVF0308AGFD	Lever, Erase Proof	AD
002	MSPRT0161AGFJ	Spring, Erase Proof Lever	AA
003	DROLR0010AGZZ	Rewind Roller Assemlby	Ak
004	MSPRT0105AGFJ	Spring, Rewind Roller Lever	AB
005	MLEVF0270AGZZ	Lever, Fast Forward Roller Assembly	AE
006	NROLP0031AGZZ	Fast Forward Roller Assembly	AK
007	MLEVF0447AGFD	Lever, Fast Forward	AC
008	MSPRT0153AGFJ	Spring, Fast Forward Roller Lever	AA
009	MLEVF0428AGZZ	Stop Lever Assembly	AG
010	PAJS-0050AFFD	Adjusting Plate, Auto Stop	AA
011	MSPRT0136AGFJ	Spring, Auto Stop Lever	AA
012	MLEVF0275AGZZ	Tape Arm Assembly	AE
013	MSPRT0137AGFJ	Spring, Tape Arm	AA
014	LCHSS0061AGZZ	Sub Chassis Assembly	AL
015	MSPRT0102AGFJ	Spring, Pinch Roller Lever	AB
016	DROLP0016AGZZ	Pinch Roller Assembly	AF
017	MSPRC0031AGMN	Spring, R/P Head Adjust	AA
018	RHEDG0014AGZZ	Head, Record/Playback	AP
019	RHEDA0008AGZZ	Head, Erase	AN
020	LANGF0266AGZZ	Bracket, Motor	AD
021	LBSHS0001AG00	Cushion, Motor, Rubber	AA
022	PSPAA0001AGFJ	Speaker, Motor	AB
023	LCHSM0154AGZZ	Mechanism Chassis Assembly	AU
024	MLEVF0457AGFD	Lever, Brake	AB
025	LX-BZ0091AGFD	Guide Shaft, Operation Lever	AB
026	LX-NZ0012AGFD	Nut, Brake Lever	AB
027	NDAIR0053AGSA	Turntable, Take-up and Supply	AF
028	MLEVF0460AGFD	Lever, Operation	AC
029	MLEVF0456AGFD	Lever, Record Connecting	AC
030	NROLM0008AGZZ	Roller, Sub Chassis Slide	AB
031	NBALS0004AGFJ	Ball, Sub Chassis, 3φ	AA
032	MSPRP0062AGFJ	Plate Spring, 3φ Ball Hold	AB
033	MSPRP0076AGFW	Spring, Cassette Tetaining	AC
034	RMOTV0050AFZZ	Motor (GF-4000H)	BA
	RMOTV0002AGZZ	Motor (GF-4010X)	BB
035	LX-BZ0148AGFD	Screw, Motor Retaining	AA
036	DBOTN0044AGSA	Function Selector Button Assembly	AV
037	MSPRT0131AGFJ	Spring, Sub Chassis Return	AA
038	MSPRD0035AGFJ	Spring, Slip Roller Lever	AB
039	NPLYR0023AGZZ	Slip Roller Assembly	AK
040	PFLT-0151AG00	Felt, Chassis Masking	AA
041	PZETF0029AGZZ	Insulator, Main Switch	AA
042	MSPRT0267AGFW	Spring, Auto Stop Lever	AA
043	NFLYC0050AFZZ	Flywheel Assembly	AT
044	PCOVM1005AGFA	Washer, Capstan Oil Cut	AA
045	NBLTK0048AG00	Belt, Capstan Drive	AD
046	LANGF0206AGFD	Bracket, Flywheel	AD
047	LX-BZ0107AGZZ	Screw, Flywheel Thrust Adjust	AB
048	MSPRP0099AGFW	Spring, REC/PLAY SW(ON-OFF)	AC
051	MLEVF0459AGFD	Lever, PAUSE	AB
052	PSPAB0102AFFW	Spacer, Stop Lever	AA
053 (SW10)	QSW-F0044AGZZ	Switch, Motor	AE

MISCELLANEOUS

REF. NO.	PART NO.	DESCRIPTION	CODE
101	GCABA0404AFSA	Front Panel (GF-4000H)	AX
	GCABA0409AFSA	Front Panel (GF-4010X)	AX
102	HINDM0645AFSA	Decoration, Front Panel (2-WAY SPEAKER)	AA
103	HDECZ0004AGZZ	Decoration, Cassette Compartment Mirror	AA
104	HDECA0258AFSA	Decoration, SLEEP/TAPE/FADER/AFC	AN
105	PFLT-0048AF00	Felt, CONDENSER MIC	AA
106	HPNLD1101AFSA	Panel, Dial	AG
107	HBDGD3052AFSA	Indication Metal, Upper	AH
108	HDECA0232AFSA	Indication Metal, Front Panel	AS
109	PFLT-0250AF00	Felt, Tweeter	AA
110	LANGT0118AFFW	Bracket, Speaker (Tweeter)	AE
111	VSP0050T-078A	Speaker, Tweeter 5cm	AL
112	PFLT-0141AF00	Felt, Woofer	AA
113	VSP0012P-128A	Speaker, Woofer 12cm	AU
114	LANGS0021AFFW	Bracket, Speaker Retaining	AB
115	JKNBN0229AFSA	Knob, Tuning	AH
116	JKNBN0230AFSA	Knob, Volume Control	AC
117	QTANZ9012AFFN	Terminal, Dial Light (Large)	AC
118	JKNBZ0054AFSA	Knob, Dial Light	AC
119	QTANZ9013AFFN	Terminal, Dial Light (Small)	AC
120	MLOKC0005AG00	Lock, Cassette Compartment Lid	AB
121	MSPRD0102AFFJ	Spring, Lock Lever	AA
122	LANGT0207AGFD	Lever, Lock Lever	AA
123	JKNBP0013AFSA	Knob, FADER Control Lever	AD
124	QPWBF0243AFZZ	P.W.B. (9-Pin Socket)	AE
125	PCUSU0200AFZZ	Cushion, VU/TUNE Meter	AA
126	JKNBZ0055AFSB	Knob, A.P.S.S. Switch	AD
127 (D304)	VHPREDLIT503F	LED, A.P.S.S. Lamp	AV
128	RMTRE0029AFZZ	VU/TUNE Meter	AS
129	MSPRC0068AFFW	Spring, A.P.S.S. Switch	AA
130	LHLDF1159AFSA	Holder, P.W.B. (9-Pin Socket)	AF
131	LANGK0059AFFW	Bracket, VU/TUNE Meter Hold	AB
132	CFTAC1051AFSA	Lid, Cassette Compartment	AN
133	MSPRT0172AGFW	Spring, Cassette Compartment	AB
135	MSPRP0082AGFW	Spring, Cassette Compartment Lid	AB
136	LANGK0060AFFW	Bracket, Cassette Compartment Lid	AA
137 (SW5, 6, 8)	QSW-B0028AGZZ	Switch, SLEEP/TAPE/AFC	AG
138 (SW4)	QSW-T0011AFZZ	Switch, FADER/ALC	AG
139	PFLT-0258AF00	Felt, SLEEP/TAPE/FADER/AFC	AA
140	JKNBM0163AFSA	Knob, SLEEP/TAPE/FADER FADER/AFC	AE
141	QPWBF0246AFZZ	P.W.B., Switch	AE
142	LHLDF1158AFZZ	Holder, Switch P.W.B.	AK
143	LHLDZ0005AG00	Holder, Built-in Microphone	AB
144	RMICC0001AFZZ	Built-in Microphone	AP
145 (SW3)	QTANZ9011AFFN	Terminal, A.P.S.S. Switching	AB
146	QCNCM0902AGZZ	Connector 9 Pin	AE
147	RLMPM0019AGZZ	Lamp, Dial Illumination	AE
148	LBSHZ0001AF00	Bushing, Dial Illumination Lamp	AA
149	KCOUB0035AGZZ	Counter	AN
150	LANGT0119AFFW	Bracket, Counter	AB
151	LHLDF1157AFZZ	Frame	AT
152	PFLT-0111AF00	Felt, Battery Protect	AE
154	PTPEC0013AF00	Tape, Battery	AA
155 (R168)	RVR-Z0041AGZZ	FADER Control Volume	AG
156 (J104)	QJAKC0003AFZZ	Jack, External Power (DC9V)	AD
157	PFLT-0198AG00	Felt, FADER Control Volume	AA
158	MSPRC0069AFFN	Spring, Battery Set	AB
159	LANGK0061AFFW	Bracket, RADIO-TAPE Switch	AF
160	PCUSG0023AF00	Cushion, Cassette Compartment	AB
161	JKNBZ0053AFSA	Knob, RADIO-TAPE Switch	AD
162	NBALS0050AFZZ	Ball, RADIO-TAPE Switch	AA
164	NPLYC0060AFFW	Pulley, Dial Cord	AA
165	NPLYB0001AFZZ	Pulley, Dial Cord	AB
166	QTANB9072AFFN	Terminal, Battery Positive Side	AC
167 (SO20)	QSOCA0253AFZZ	Socket, AC Input (GF-4000H)	AG
	QSOCA0011AGZZ	Socket, AC Input (GF-4010X)	AF
168	LX-NZ0011AFFW	Nut, Tuning Shaft	AA
169	PSLDM3094AFZZ	Shield Plate	AB
170	NSFTD0086AFFW	Tuning Shaft	AD
171	PZETF0032AFZZ	Insulation Plate	AA
172	RTRNP0363AFZZ	Power Trans. (GF-4000H)	AV
	RTRNP0379AFZZ	Power Trans. (GF-4010X)	AV
173	QPWBF0385AFZZ	P.W.B., Tuner (GF-4000H)	AK
	QPWBF0395AFZZ	P.W.B., Tuner (GF-4010X)	AH
174	NDRM-0040AFZZ	Drum, Dial Cord	AB
175	QFSHC2050AFZZ	Fuse, Holder (GF-4000H)	AE
176 (SO201)	QSOCE0410AGZZ	Socket, Voltage Selector	AH
178	PFLT-0260AF00	Felt, Band Selector Switch	AA
179	JKNBM0162AFSA	Knob, Band Selector Switch	AB
180 (R131)	RVR-A0042AFZZ	Control, REC LEVEL	AF
181 (R209, 206)	RVR-B0046AFZZ	Control, BASS/TREBLE	AF
182 (R211)	RVR-B0026AFZZ	Control,VOLUME	AF
183	LX-NZ0046AGZZ	Nut, Handle	AA
184	OPWBF0055AFZZ	P.W.B., Audio	AW
185	QJAKH0050AFZZ	Jack, Plate	AP
186	PSPO-0049AF00	Cushion, Audio P.W.B. Set	AA
187 (SW1)	QSW-S0099AFZZ	Switch, REC/PLAY	AK
188 (SW2)	QSW-S0106AFZZ	Switch, RADIO-TAPE Selector	AH
189	DHHH-0011AF01	Plug, 9 Pin	—
190	MLEVP0050AFZZ	Lever, RADIO-TAPE Selector Switch	AC
191	HDALM0151AFSA	Dial Plate (GF-4000H)	AH
	HDALM0152AFSA	Dial Plate (GF-4010X)	AK
192	HSSND0050AGSB	Pointer, Dial	AE
193	JHNDA1004AFSA	Handle	AW
194	LX-WZ0021AFFJ	Washer, Handle	AA
195	LBOSF0009AFFW	Cushion, Handle	AD
197	GCABB0377AFSA	Cabinet, Bottom	AT
198	GFTAB1092AFSA	Lid, Battery Compartment	AF
199	PCUSU0092AG00	Cushion, Battery Compartment Cover	AA
200	QANTR0048AFZZ	Rod Antenna	AR
201	LHLDA1034AFSA	Holder, Rod Antenna	AB
202	LX-WZ0018AFFW	Washer, Rod Antenna	AA

PARTS LIST

MODEL
GF-4000H
GF-4010X

REF. NO.	PART NO.	DESCRIPTION	CODE
204	HINDM0988AFSA	Indication Metal, Model Name (GF-4000H)	AD
	HINDM1000AFSA	Indication Metal, Model Name (GF-4010X)	AD
205 (L11)	RCILA0353AFZZ	Coil, MW/LW (GF-4000H)	AD
	RCILA0357AFZZ	Coil, SW1/MW (GF-4010X)	AE
206	LHLDC1036AFZZ	Holder, Antenna Coil	AB
207	PSPO-0049AF00	Sponge, Cabinet Hold	AA
208	NBLTK0050AG00	Counter Belt	AD
209	MSPRC0011AFZZ	Spring, Dial Cord	AA
210 (SW9)	QSW-P0107AFZZ	Switch, Band Selector	AR
211	PFLT-0130AG00	Felt, Cassette Spring	AA
212	QTIPF0001CEYW	Tip, FM Antenna	AA
213	LX-WZ5003AFZZ	Washer, Handle	AA
215	PSLDM3093AFFW	Shield Plate, Tuner P.W.B.	AC
	RPHOE0013AFZZ	Earphone	AD
	PCUSG0004AF00	Cushion, Variable Capacitor (GF-4010X)	AA
	PITOT0305AF00	Cord, Dial Cord	AA
	PSPAB0101AFFW	Spacer, Drum	
	QFS-C801CAGNI	Fuse, 0.8A (GF-4000H)	AE
	RTPEK0033AGZZ	Cassette Tape	AM
	QACCL0004AG0D	AC Supply Cord (GF-4010X) (SAA)	AN
	QACCZ0042AG0D	AC Supply Cord (GF-4010X) (Without AC Plug)	AH
	QACCZ0043AG0D	AC Supply Cord (GF-4010X) (With AC Plug)	AK
	QACCB0003AG0V	AC Supply Cord (GF-4000H) (Without AC Plug)	AL
	QACCK0002AG0V	AC Supply Cord (GF-4000H) (With AC Plug)	AP

TECHNICAL INFORMATION

The built-in microphone used in these models are changed as follows:

REF. NO.	OLD	NEW
144	(microphone) RMICC0001AFZZ	(microphone with holder) RMICC0050AFZZ
143	(microphone with holder) LHLDZ0005AG00	Delete